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A comparison of college recreational opportunities and students' recreational interests and participation

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A COMPARISON OF COLLEGE RECREATIONAL OPPORTUNITIES
AND STUDENTS' RECREATIONAL INTERESTS
AND PARTICIPATION

A Thesis
Presented to
the Faculty of the Graduate School
University of Pacific

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Paige Boynton
May 1975

This thesis, written and submitted by

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May 8, 1975

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CHAPTER I

INTRODUCTION

Educators have become more intensively aware of man's increasing leisure time and the problems of how to use that time in a most satisfying and rewarding way. In order to meet the desires and needs within man's leisure time, further research is needed to determine the recreational pursuits man enjoys and participates in. Only in this way, may facilities and leadership be provided to extend his recreational well-being.

Man needs education in the wise use of leisure time (Miller & Robinson, 1969, p. 268). Colleges and universities today offer broad recreational programs. What better place to learn and participate in meaningful and fulfilling leisure-time activities that have carry-over value for later years than in college?

Statement of the Problem

The purpose of this study was to determine the extent to which current University of the Pacific campus recreational opportunities meet student recreational interests.

The following subpurposes were established:

- 1) To determine the available recreational opportunities on campus, or in connection with the campus.

2) To evaluate student participation in the current recreational opportunities.

3) To determine the recreational opportunities students would desire to see on campus, other than that which is currently offered.

Importance of the Study

A majority of the research performed within the area of recreational pursuits has investigated varying communities and recreational pursuits in relation to occupation, status and economic level, and location. Little research within the past ten years has focused on the college campus and student recreational interests.

Additional research in recreation and physical education is needed to further shed light on college-age adults and ascertain their recreational interests and desires toward a more enriching life.

Currently, many private universities and colleges are struggling for increased enrollment. Bowers and Fugh (1972) in a recent investigation found that the social climate and recreational activity program are factors influencing a student's college selection. A well developed recreation program should aid in recruiting new students, as well as meeting the recreational interests of its matriculated students. It was hoped that this study will aid in determining college students' recreational desires and participation. In this way, programs may be better improved to

promote skills for leisure-time enjoyment.

Hypotheses

The hypotheses for this study were presented in null form:

1) There will be no significant difference between students' desire to participate in recreational opportunities and their actual participation in recreational opportunities sponsored by the University of the Pacific.

2) There will be no significant difference between students' participation in recreational opportunities sponsored by the University of the Pacific and their participation in recreational opportunities not sponsored by the University of the Pacific.

Basic Assumptions

The following assumptions were stated:

1) All students would answer the questionnaire truthfully.

2) The absence of students from class would not affect the results of this study.

Delimitations of the Study

1) This study was geographically delimited to the University of the Pacific, Stockton, California.

2) This study was conducted during the Fall semester, 1974.

3) This study was concerned only with registered University of the Pacific undergraduate students for the Fall semester, 1974.

4) Classes in physical education activity, independent studies, field studies and special projects, musical instrument practice classes, and internships were excluded from the study.

Objectives of the Study

The following objectives were advanced for this study: (1) to illustrate the relationship between the recreational activities students desire to participate in and those they participate in through the University of the Pacific sponsored programs; (2) to illustrate the relationship between the recreational activities students participate in through the University of the Pacific and those they engage in that were not University sponsored; and, (3) to illustrate students' recreational interests through the degree of participation in and desire for recreational activities.

Definition of Terms

Recreational activities. Butler defines these as "... any form of experience or activity in which an individual engages from choice because of the personal enjoyment and satisfaction which it brings directly to him" (Butler, 1967, p. 11).

Leisure. For the purposes of this study, the following definition of leisure was employed:

The essence of leisure seems to be freedom. Freedom of time and attitude. As time it is that period of life not spent in making a living or in self-maintenance. As an attitude it is related to free will, lack of compulsion, and choice (Gray & Pelegrino, 1973, p. 26).

Undergraduate students. Those students following a curriculum program toward a Bachelor of Arts or Sciences degree from a college within the University of the Pacific.

Intramural program. A volunteer program for University of the Pacific students to compete against one another in team or individual sports.

Desire. A "conscious impulse toward an object or experience that promises enjoyment or satisfaction in its attainment" (Grove, 1961, p. 612).

CHAPTER II

REVIEW OF LITERATURE

Although current research has investigated the recreational opportunities of adults in relation to occupation and social class, little research within the past ten years has focused on the college campus and its students. Within this chapter, a summary will be given of recent surveys investigating the recreational opportunities at various California colleges and universities. Also presented will be some writings revealing the recruiting force of college recreation programs, and a summary of research dealing with adult recreational activity as a function of higher education.

Recreational Opportunities at California Colleges

The author mailed a survey questionnaire containing a list of recreational opportunities currently available at the University of the Pacific, to eight private colleges/universities and one State-directed university, all similar in size and/or enrollment to the University of the Pacific. (A copy of the questionnaire may be found in Appendix A). Allowing the recreational opportunities of the University of the Pacific to serve as a guide, the physical education directors of each college were requested to indicate those recreational activities

they offered, and the specific means by which the activities were provided; that is, by a class, intercollegiate athletics, club, or intramurals. In some colleges, the questionnaire was referred to another individual in the recreation or intramural program. Thus, not all questionnaires were answered by the physical education directors.

Seven private colleges, and one State-directed university responded to the questionnaire. None of the six private colleges offered all the recreational opportunities of the University of the Pacific; a range of between eight and nineteen activities (for four colleges, three of these included a Newman Center) were not offered, or received no response. However, some of the recreational activities provided were offered by means exclusive and/or in addition to those of the University of the Pacific. Those recreational activities offered through additional programs other than those of the University of the Pacific are given below.

1) Saint Mary's College: Five activities were offered through additional programs: badminton (intramurals); table tennis (club); fencing (intercollegiate); rowing (class, intercollegiate); and, billiards (intramurals).

2) Occidental College: Badminton (club); and, sailing (intercollegiate). Rugby, offered through intercollegiate athletics was an activity added to the given list of questionnaire items. This was not offered at the University of the Pacific.

3) U.S. International University: Badminton (intramurals); bowling (intramurals); ice skating (living arrangement, intramurals); soccer (intramurals); and, billiards (intramurals).

4) University of Redlands: Badminton (intramurals); and, bowling (intramurals). Four recreational opportunities offered through an activity class, were added to the given list of questionnaire items: trap and skeet, archery, trampoline, and cycling.

5) University of San Francisco: Several activities were available through additional programs other than those at the University of the Pacific: badminton (intramurals, intercollegiate); bowling (intramurals); gymnastics (intramurals); fitness (intramurals); karate, judo, and aikido (intramurals); soccer (intramurals); bicycling (club, intramurals); jogging (club, intramurals); and, rowing (intramurals). The University of San Francisco had a wider range of programs, including boxing and a variety of intramural clinics.

6) Pepperdine University: Nineteen of the listed activities received no response. The following activities were added to the given list: racquetball, cross country, co-ed free-throw contest, and co-ed two-on-two basketball, all offered through the intramural program. The intramural program included many supplemental activities other than those at the University of the Pacific:

badminton; bowling; weight training; men/women's fitness; handball; water polo; bicycling; jogging; horseback riding; billiards; weekend retreats (intramurals, student body); campus concerts; and, campus films.

7) University of Santa Clara: Four activities were available through additional programs other than those sponsored by the University of the Pacific, each included women as well as men: badminton (intercollegiate); bowling (intercollegiate, intramurals); golf (intercollegiate); and, rowing (intercollegiate). The following activities were added to the given list, each offered through an activity class: ballroom dance; bridge; women's fixit class; and, women's classes in belly dance, self defense, and aquathenics. Jogging, horseback riding, snow skiing, and scuba diving were offered through clubs rather than an activity class.

The one State-directed university, the University of California at Santa Cruz offered all the recreational opportunities of the University of the Pacific with the exception of use of the Y.M.C.A., afforded University of the Pacific students. Santa Cruz has a separate recreation program providing greater opportunity for these selected recreational activities. All the activities were available through a greater number of programs. Racquetball, archery, boxing, croquet, surfing, rock climbing, river rafting, hiking, cave exploring,

innertubing, and clamming were recreational opportunities provided through their recreation program.

In the Spring, 1974, Mr. Jerry Winford, on behalf of the University of California at Santa Barbara Recreation Department, mailed a questionnaire to sixty-nine colleges and universities in California. One purpose was to determine the recreational activities and services offered by college recreation departments. Among those services that each college was requested to list included: cultural art classes, sports classes, special trips (ski, river tours), clubs (social, cometitive, other), and facilities.

Those recreational opportunities and services that were offered by the colleges similar in size and/or enrollment to the University of the Pacific, but not currently offered at the University of the Pacific are stated below (Winford, 1975).

1) University of San Diego (private university):
Sport classes: archery; Special trips: hiking and ice skating; Clubs: scuba, sailing, surf, and jog and swim; and, Facilities: six outdoor handball courts, and exercise rooms in addition to weightrooms.

2) California State Bakerfield: Cultural art classes: craft classes (knitting, batik, weaving, leather, silk screening, and decoupage); Special trips: horseback riding, clam dig, bicycling trip, and picnics;

and clubs: bowling, table tennis, and chess.

3) University of California at Riverside:

Cultural art classes: batik, belly dance, bread making, bridge, crochet, dog obedience, cooking, macrame, spinning and dyeing, wine tasting, leather, and auto care; Special trips: Dodger baseball, and fishing; and, Clubs: radio, bridge, computer, sailing, table tennis, and scuba.

4) University of California at Irvine: Clubs:

twenty-five sports clubs, including archery through wrestling.

5) University of California at Santa Cruz:

Cultural art classes: African dance, sport classes: archery, rock climbing, and surf; Special trips: hiking, rafting, ice skating, rollerskating, and cycling; Clubs: fifteen clubs (cricket, racquetball, rugby, folk dance, handball, etc.); and, Facilities: handball courts (an additional number than available at the University of the Pacific), horseshoe courts, and track.

The University of the Pacific does not offer, as yet, a coordinated recreation program, but it does provide an intramural program funded through the Associated Student Body. The University of the Pacific offers many programs throughout the University, however, it appears that the State-directed colleges in Mr. Winford's survey have more extensive offerings.

Most of the colleges receive their operational funds for the recreation program from registration, or

tuition fees (Winford, 1974). The University of the Pacific, as a private institution, assumes 75 percent of the total educational operating costs from tuition fees. The instructional fees for the University of the Pacific's physical education program were drawn from the College of the Pacific's operational funds (Dr. Glen Albaugh, 1975). As Powers (1965) states:

Private schools have found it increasingly difficult to remain solvent, because of the great increase in educational operating costs ... Public education has received larger legislative appropriations to deal with this, but private institutions, relying on income from tuition fees and endowments, have not received corresponding increases (Powers, 1965, p. 52).

The State-directed colleges and universities offer and maintain a larger budget due to additional State and Federal funding. As a private university, the University of the Pacific was more limited in its opportunities, services, and facilities than these State-directed colleges. In comparison to the other private colleges included in the survey, the University of the Pacific and the University of San Francisco offered greatest recreational opportunity.

The Recruiting Force of a College's Recreation Program

Three recent studies analyze factors affecting a student's choice of a college. Most recently, in a study comparing factors relating to college choice by students and parents, Bowers and Pugh (1972) found

that although strong consensus existed among students and parents that the most important factor was academics, the social factor was significantly greater for students than parents. Under the social and cultural factor, students ranked social climate highest (.75), and recreation (.69) second.

In another study, Richards, Jr. and Holland (1965) gathered data from 8,292 high school ACT testing applicants. Using a three point rating scale, the students were asked to rank 27 items on the student profile section of the American Testing Battery. These items represented factors influencing a student's college choice. The most influential factors were:

1) For men: Good faculty (2.58); high scholastic standards (2.57); special curriculum (2.42); desirable location (2.38); ranked 7th, comprehensive physical and education facilities (2.25); and ranked 8th, desirable social climate and activities program (2.21). In the middle of the scale, ranked the factor "a good athletic program" (1.85).

2) For women: High scholastic standards (2.67); good faculty (2.63); special curriculum (2.56); desirable location (2.49); ranked 7th, comprehensive physical and educational facilities (2.31); and ranked 8th, desirable social climate and activities program (2.30).

In matching influence factors between males

and females under the category "social emphasis," high loadings were found on "... desirable social climate, good athletic program, ... fraternities and sororities, and coeducational." Similarity was demonstrated between men and women.

Terte (1964) reported on a survey performed by the Educational Testing Service of 13,000 students entering 25 colleges. The results indicated that at this time 50.8 percent of the students signified their major interest in college to be "social life, extra-curricular activities, athletics, forming new friendships and carrying on college tradition" (Terte, 1964, p. 37).

Adult Recreational Activity as a Function of Higher Education

In recent research, The Challenge of Leisure: A Southern Californis Case Study, education was found to play a role in the frequency of recreational participation; participation increasing with more years of formal schooling. It was also estimated that most fully employed adults enjoy fewer than 30 hours per week of leisure, while the "average" adult enjoys between 25 and 50 hours of leisure each week (Southern California Research Council, 1967, pp. 17; 34).

The growth of leisure is well known. Kraus (1966) explains that since the beginning of the Industrial Revolution, we have seen a shorter work week,

increased vacations and paid holidays, earlier retirement, not to mention the consequences of automation, medical and social advances, and modern technology in general. There is no question that leisure will continue to grow in opportunity and availability (Kraus, 1966, pp. 9-10).

Gray and Pelegrino (1973, p. 364) believe today that leading educators agree that we are in an age where education for leisure is equally as important as education for vocation. Colleges and universities must extend and broaden the recreational opportunities for creative and intelligent use of leisure time.

Kraus (1971) discussed research indicating the role of higher education in adult recreational activity. Sociologists noted that those with higher levels of education tend to participate "more widely and intensely" in varied recreational pursuits (Kraus, 1971, p. 7). For example, the Outdoor Recreation Resource Commission found "... that those with a college education engaged in a greater amount of outdoor recreational activities per year, ... than those having only a high school education " (Kraus, 1971, pp. 7-8).

Kraus (1971) continued the discussion of higher education with the following statement:

One of the effects of higher education is that it exposes one to a variety of ideas and experiences which inevitably broaden leisure interests and promote habits of varied participation. Thus, the student who has studied music, art, and literature, who has been a part of the cultural life of a university with its opportunities for drama, dance, and social activity, maybe expected to be far more active in his own community's life than an individual with a narrower background (Kraus, 1971, p. 8).

A national survey performed by J. A. Ward, Inc. (cited in De Grazia, 1962) gathered statistics on college women and noncollege women, investigating the way they spend their leisure time. The results showed college women to have real differences in taste: college women participated in more sports; a greater percent belong to civic and cultural clubs; and they show a greater liking for varying types of music.

In a study entitled "The Significance of Adults Physical Activity As a Function of Age, Sex, Education, and Socio-economic Status," Kenyon (1964) sampled the adult population of Wisconsin. Regarding interest in physical activity as a function of education, it was found with only three exceptions, "those with greater educational achievements tended to be physically active more often, regardless of season" (Kenyon, 1964, p. 6). The only exceptions were walking for exercise; an activity relatively popular among adults regardless of their educational background, and calisthenics engaged in by women in the summer season. Another category, secondary participation, consisting of attendance at

sports events and watching or listening to sporting events, varied with the season. During the fall season, a positive relationship was found between education and attendance.

Other studies (Clarke, 1956; Dowell, 1967; Kaplan, 1960a; Reissman, 1954; White, 1955; Zborowski & Eyde, 1962) have reported an association between participation in leisure activities and social class. With the exception of Dowell (1967), these studies used educational attainment or family income as a measure of social status.

Reissman (1954) divided a number of families into class groups according to occupation, income, and education. It was found that those in "higher" class positions were most active and diverse in their leisure and social participation than those in "lower" class positions. They also showed a "... greater willingness to exercise leadership and concern" in community problems (Reissman, 1954, p. 84). White (1955) and Clarke (1956) also supported the differences or variations in the types of leisure activities when comparing socio-economic levels of adults.

Zborowski and Eyde (1962) discussed the effects of education and income on aging and social participation. In comparing adults of higher education and higher

income with those of lower status (higher education was closely associated with higher income), women were more affected by age and socio-economic variables than men. Men indicated a loss in the number of social friends as a function of lower income and education; for women, a function of age only. In regard to the frequency of their contact with social friends, it was the older men of higher income who indicated a decrease; for women, age was not a factor of decreased contact, only lower income and education. Both men and women of higher education were involved in more volunteer (social) activities. Thus, aging was only one variable affecting social participation.

Dowell (1967) used occupation to classify workers into four social groups. Studying all forms of recreational activities, wide differences were found between each social group in the types of activities they participate in. Dowell's research also showed many adult interests similar to college students, with an increased interest and participation in sedentary activities (reading, cards, movies). Adults indicated a high interest in individual sports after college.

A similar study (Burdge, 1969) investigated the relationship between specific leisure activities and levels of occupation. Those individuals with high income, young age categories and high education levels,

were the most active participants in structured leisure activities (specially named and socially recognized activities). The higher the occupational prestige group, the more prospective the participation in private outdoor recreation, in individual sports, and hobbies requiring aesthetic and educational background. The highest attendance at sports events was for the higher occupational prestige groups; the only exceptions were boxing, wrestling, and stock cars.

Lindsay and Ogle (1972) and Christensen and Yoesting (1973) reported on the use of outdoor recreation facilities as a function of education. Lindsay and Ogle (1972) found that participation in outdoor recreation tended to increase as the amount of education increased. Similarly, Christensen and Yoesting (1973) found that high users of outdoor recreation facilities will have significantly more years of formal education than will lower users.

The researcher found it interesting to consider the recreational effects on the children of higher education individuals. Yoesting and Burkhead (1973) examined the relationship between childhood recreation experience and adult leisure behavior. The results indicated that individuals active as children in outdoor recreation continue to be active as adults; "... socialization during childhood and the familiarity of activities participated in have an impact in the

determination of adult recreation behavior" (Yoesting & Burkhead, 1973, p. 33). Perhaps, the active participation and diverse interest in recreational activities of adults with more formal years of education will heighten the participation and enthusiasm in leisure opportunities of their children.

In summary, higher education appears to be closely associated with greater recreational participation and a wide range of leisure interests. These individual's life experiences may open an avenue of opportunities.

Summary

A comparison of two recent surveys indicated that the University of the Pacific offered a greater breadth and scope of recreational opportunity when compared to similar private colleges in California. However, in relationship to State-directed colleges, the University of the Pacific observed a more limited range of recreational opportunity.

Research was presented revealing factors that affect a student's choice of a college. A college's recreational climate and athletic, or activity, program were found to be highly influential factors.

As previously noted, very little research has been recently performed dealing with college students and recreational opportunity. In order to discern

whether adult recreational activity is influenced by higher education, observation was made of adult recreational pursuits of those individuals out of college. A close association was found between greater recreational participation and a broad range of leisure interests, and a higher degree of formal education.

CHAPTER III

RESEARCH METHODOLOGY

Within this chapter the procedures and techniques for data collection, and the methods for data analysis in this descriptive research study were presented.

Sources of Data

The study population represented all undergraduate University of the Pacific students. The sample was stratified according to the cluster colleges that make up the University of the Pacific: College of the Pacific, Callison College, Raymond College, the Conservatory of Music, Elbert Covell College, the School of Pharmacy, the School of Education, and the School of Engineering. An eight percent sample from the total enrollment of each cluster college was chosen. This represented 316.3 students: College of the Pacific (146.6); Callison College (14.2); Raymond College (21); Conservatory of Music (21); Elbert Covell College (14); School of Pharmacy (59); School of Education (27.5); and, the School of Engineering (13). The total enrollment figures of each cluster college were obtained from the University registrar's office, which represented the preliminary figures available at that time.

It was felt that a sample of 317 undergraduate students would project representative data, meeting the needs of this study. The sample was stratified according to the cluster colleges in an effort to make the sample representative of the total University of the Pacific population.

Instrument Used for Data Collection

A survey questionnaire developed by the author served as the data collecting instrument (see Appendix B). The questionnaire was composed of listed recreational opportunities in which each item was followed by a five point rating scale based on the "Likert scoring method" (English & English, 1958, p.296). The students responded to each item by selecting one of five answers : 1) never, 2) seldom (1-3 times a year), 3) occasionally (1-3 times a month), 4) often (3-6 times a month), and 5) very often (7 or more times a month). The questionnaire consisted of three sections: 1) student's desire to participate in recreational opportunities if they were offered through the University of the Pacific; 2) student's actual participation in recreational opportunities through the University; and, 3) student's actual participation in recreational opportunities not sponsored by the University. A list of the current recreational opportunities sponsored by the University of the Pacific was compiled from various sources: 1974 Class Schedule,

intramural office, and club coordinators.

The validity of the questionnaire instrument was provided after careful analysis by a panel of University of the Pacific physical education and recreation professors, chiefly Dr. Connor Sutton of the physical education department and Dr. Bobby R. Hopkins, educational research department.

A test-retest for reliability of the questionnaire was administered to a freshman Information and Imagination class. Thirty-seven students completed the pretest and posttest. The pretest was administered by the author and two weeks following, the same test was given to determine if a change in students' responses had occurred.

✓ The Pearson product moment correlation was used in computing student's change in response scores. A mean score of .812 was received for a correlation of scores between the pretest and posttest. Dr. Bobby R. Hopkins (1974) felt this represented a sufficient correlation score due to the attitudinal response requested in part of the questionnaire instrument.

Collection of the Data

The selection of an eight percent student sample from each cluster college was chosen through randomly-selected theory classes. A 1974 Fall Class Schedule was secured from the University registrar's office. All theory courses were grouped together

according to the cluster college in which they were offered. Each theory course was consecutively numbered within the cluster college. Those courses which were cross-listed within departments of one college were not numbered twice. However, if a course was cross-listed with another college, it was given a number in both colleges. Those courses that would present difficulty in reaching students were not numbered: physical education activity classes, independent studies, field studies and special projects, musical instrument practice classes, and internships.

From a table of random numbers, the sample was drawn. Matching the table number with the numbered theory course in each cluster college, the sample was selected. Enrollment figures for the randomly-selected classes were obtained from the registrar's office for use in this study. The number of classes chosen for analysis was influenced by the class size and the eight percent sample desired from each cluster college.

The author contacted the professors of each randomly-selected theory class to request permission to personally administer the questionnaire. The students required fifteen to twenty minutes to complete the questionnaire. A convenient time and date to administer the questionnaire within the classroom was arranged. In an effort to obtain maximum enrollment in each class,

a Tuesday, Wednesday, or Thursday date was preferred. The sample consisted of nineteen theory classes. (A list of the classes and corresponding colleges may be found in Appendix C).

The author administered the questionnaire within each randomly-selected class. The three sections of the questionnaire instrument were presented in varying order of approximately equal number, so that every student did not have the same sequence of sections. Immediately prior to the test administration, verbal instructions (see Appendix B) were read to the students.

Analysis of the Data

To test the null hypotheses for this study, T scores were computed for students' scores between the three sections of the questionnaire. The .05 level of significance was established for hypotheses testing.

The questionnaire data were analyzed to determine the mean, the standard error of the mean, and the 95 percent confidence interval of the mean for each recreational activity item. The data were further presented by illustrative graphs and charts.

CHAPTER IV

RESULTS

Within the nineteen randomly-selected classrooms, 383 students were administered the questionnaire. Seventy-eight students' response questionnaires were not included for analysis due to the following reasons: graduate students' responses were not included in the sample population; students leaving whole sections of the questionnaire unanswered were unsuitable for analysis; and in keeping with the eight percent sample of each cluster college, students' responses were randomly drawn out. Some classes had enrolled students from more than one school of study. Hence, with the exception of the College of the Pacific, each cluster college had an initial sample size larger than eight percent. Accordingly, student's responses were rejected by random drawing, resulting in the final total stratified random sample of 305 undergraduate students as follows: College of the Pacific (120); Raymond College (23); Callison College (15); Elbert Coveil College (16); School of Education (29); School of Engineering (15); School of Pharmacy (66); and, the Conservatory of Music (21).

The sample population represented 8.5 percent of the total 1974 Fall semester undergraduate population (3,678 students).

Permission to administer the questionnaire was not received for one of the classes in the sample. In replacement, another class from the corresponding cluster college was randomly-selected using the table of random numbers.

For the total sample, the means and their 95 percent confidence intervals were computed for each recreational activity included in the three sections of the questionnaire. Each standard error score for the mean of each activity was multiplied by 2.00 to compute the 95 percent confidence interval of the mean.

Illustrated in the graphs on pages 45 through 48 are the means and their 95 percent confidence intervals comparing students' degree of desire to participate in recreational opportunities, if they were offered through the University of the Pacific and students' degree of participation in recreational opportunities currently offered through the University of the Pacific. Students' scores demonstrated a significant difference between their desire to participate and their actual participation through the University; attending sports events represented the only recreation in which students did not exhibit a greater desire to participate than their actual participation, as indicated by the overlapping of the 95 percent confidence intervals of the means.

By the graphs on pages 49 through 52 comparisons

may be shown of mean scores and their 95 percent confidence intervals for students' degree of participation in recreational opportunities outside, or not sponsored by the University of the Pacific, and their participation in recreational opportunities through the University. It may be seen that many of the differences in mean scores were not statistically significant. However, with the exception of four activities, mean scores were highest for students' degree of participation outside the University of the Pacific.

Certain activities were listed twice in sections of the questionnaire (see Appendix B); for example, basketball and gymnastics were listed twice under sports in the desired-activity section. This offered a check on the reliability, to determine if students would respond in the same manner if an activity were listed a second time. Therefore, a number of activities were illustrated more than once in the graphs and charts. Computing a Pearson product moment correlation ($r=1.00$) between those activities, the following results in checking the reliability were found: (1) desire for basketball ($r=.94$), gymnastics ($r=.87$), bicycling ($r=.88$); (2) participation in University golf ($r=.86$), jogging ($r=.90$); and, (3) participation outside the University in swimming ($r=.90$), golf ($r=.96$), jogging ($r=.90$).

Recreational opportunities listed were not identical due to the nature of each section of the questionnaire. In those instances direct comparisons could not be made. Students' mean scores and their 95 percent confidence intervals for these activities were shown in the graphs on pages 53 through 55. Denoted in these graphs were the highest mean scores for each section of the questionnaire. Listening to music (3.61) represented students' highest desired activity, and also, students' most participated in activity outside the University (4.36); and, the library: reading (3.15) represented students' highest degree of participation through the University.

A general profile of each student was requested on the cover page of the questionnaire (see Appendix B). The mean scores for the following items were computed:

- (1) Age = 20.76 and sex = 1.52 (1=male; 2=female);
- (2) Year in school = 2.61 (1=freshman; 2=sophomore; 3=junior; 4=senior);
- (3) Marital status = 1.09 (1=single; 2=married); and,
- (4) Residence = 1.45 (1=on campus; 2=off campus).

Approximately an equal portion of sampled students were found to live on or off campus.* To determine if a significant pattern existed between those students living on or off campus and their degree of participation in recreational opportunities through the University and outside the University, a Point Biserial correlation was computed between students' scores (Roscoe, 1969, pp. 113-114).

No significant correlations were found between students' residence on or off campus and their degree of participation in recreational activities through and outside the University.

The null hypotheses were tested, at the .05 level of significance by t-test computer programs. A t-ratio value of 1.972 was necessary for significance at the .05 level; and, a 2.601 value at the .01 level.

Table I displays the t-ratios between students' degree of desire to participate in recreational opportunities and students' degree of participation through the University. As can be seen, all t-ratios for each recreational activity were found to be significant at the .01 level, indicating a greater degree of desire to participate than actual participation through the University.

Table II illustrates the t-ratios between students' degree of participation in recreational opportunities outside, or not sponsored by the University and students' degree of participation through the University. Out of forty-seven listed activities, all but eight were significant at the .05 and .01 level, indicating a greater participation in recreational activities outside the University of the Pacific.

In summary of Tables I and II, students' t-ratios indicated: (1) a significantly greater degree of desire

TABLE I

A COMPARISON OF STUDENTS' DEGREE OF DESIRE TO PARTICIPATE IN
RECREATIONAL OPPORTUNITIES, AND THEIR DEGREE OF ACTUAL
PARTICIPATION THROUGH THE UNIVERSITY OF THE PACIFIC

Recreational Opportunities	t-ratios	N
Basketball	7.55**	301
Basketball	8.27**	301
Badminton	10.07**	304
Volleyball	12.93**	303
Table Tennis	8.57**	303
Tennis	11.95**	304
Bowling	10.41**	303
Golf	8.30**	303
Golf	8.01**	301
Gymnastics	8.75**	301
Gymnastics	9.06**	302
Weight Training	8.42**	303
Men/Women's Fitness	11.48**	302
Handball	7.85**	302
Karate	8.31**	304
Judo	7.61**	301
Yoga	7.81**	302
Dance	8.77**	304
Ice Skating	10.87**	302
Football	7.03**	300
Baseball	9.34**	304
Soccer	8.56**	301
Water Polo	4.40**	302
Jogging	10.33**	302
Swimming	9.93**	302
Bicycling	12.77**	303
Bicycling	10.04**	303
Jogging	8.64**	302
Backpacking	13.82**	304
Cross Country Skiing	10.69**	304
Snow Skiing	12.11**	304
Scuba Diving	10.54**	303

**For significance at the .01 level t must be 2.601
or greater.

TABLE I (continued)

Recreational Opportunities	t-ratios	N
Sailing	15.15**	303
Rowing	8.40**	303
Horseback Riding	12.55**	301
Watching TV	4.99**	303
Attending: Sports Events	2.79**	302
Attending: Concerts, Plays	9.86**	302
Attending: Movies, Films	13.47**	304
Musical Instruments, Lessons	11.93**	300
Billiards	8.76**	296
Photography	14.40**	296
Art	10.15**	298
Crafts	12.63**	296
Participating in Clubs	8.74**	299

**For significance at the .01 level t must be 2.601 or greater.

TABLE II

A COMPARISON OF STUDENTS' DEGREE OF PARTICIPATION IN RECREATIONAL OPPORTUNITIES OUTSIDE THE UNIVERSITY OF THE PACIFIC, AND THEIR DEGREE OF PARTICIPATION THROUGH THE UNIVERSITY

Recreational Opportunities	t-ratios	N
Badminton	3.86**	303
Volleyball	7.63**	303
Tennis	8.07**	301
Table Tennis	6.05**	303
Swimming	11.12**	301
Swimming	9.99**	300
Bowling	8.25**	302
Golf	5.92**	303
Golf	4.51**	301
Fencing	.761	303
Gymnastics	3.21**	301
Weight Training	3.46**	302
Men/Women's Fitness	8.37**	301
Handball	.727	303
Karate	1.36	302
Judo	.761	302
Aikido	.112	302
Yoga	1.50	300
Dance	4.86**	300
Ice Skating	6.47**	301
Football	1.979*	302
Basketball	3.49**	300
Baseball	5.65**	302
Soccer	3.86**	303
Water Polo	.226	300
Bicycling	13.79**	301
Jogging	7.04**	302
Jogging	5.11**	301
Jogging	8.61**	302
Jogging	6.91**	301
Horseback Riding	5.73**	301
Snow Skiing	6.83**	303
Scuba Diving	2.68**	302

*For significance at the .05 level t must be 1.972 or greater.

**For significance at the .01 level t must be 2.601 or greater.

TABLE II (continued)

Recreational Opportunities	t-ratios	N
Sailing	7.58**	303
Backpacking	6.79**	303
Cross Country Skiing	3.18**	302
Rowing	3.05**	303
Watching TV	11.52**	302
Billiards	4.16**	296
Attending: Sports Events	1.51	301
Attending: Concerts, Plays	2.17*	302
Attending: Movies, Films	9.57**	303
Participating in Clubs	3.81**	303
Musical Instruments, Lessons	9.08**	302
Photography	8.49**	290
Art	6.11**	295
Crafts	8.80**	295

*For significance at the .05 level t must be 1.972 or greater.

**For significance at the .01 level t must be 2.601 or greater.

to participate in recreational opportunities, than actual participation in recreational opportunities offered through the University; and, (2) a significantly greater degree of participation in recreational opportunities not sponsored by the University, than participation through the University.

X At the end of each questionnaire section, students were requested to (1) list comments or other activities desired or actually participated in, and (2) list the opportunities they were unaware existed through the University. Less than half of each cluster college sample, with the exception of Raymond College, responded to any of these requests. Of those students, most were aware of the activities offered through the University as listed in the questionnaire. Students were unaware of the Newman Center, use of the Y.M.C.A., sailing, and Anderson Y: rowing. Concerning comments, or other activities students desired or participated in, a myriad of personal responses were expressed ranging from racquetball, reading, socializing, and rafting to cooking and gardening. Raymond College students displayed a strong desire and outside participation in lodgeball, a recreational activity the students designed. The students also participated outside the University in Tai Chi, one of the Marshal Arts.

A separate profile of mean scores for responses from each of the cluster colleges showed similarity among students' most desired recreational activities, and students' most participated in activities through and outside the University of the Pacific. Activities having two scores were those listed more than once in sections of the questionnaire.

College of the Pacific

Of the cluster colleges, College of the Pacific students exhibited the greatest desire and participation outside the University. A summary of the highest mean scores follows.

Desire: listening to music (3.73); traveling for pleasure (3.43); movies (3.54); attending sports events (3.40); attending concerts, plays (3.35); bicycling (3.38; 3.16); going to dances (3.33); tennis (3.20); and TV (3.08).

Participation University: library: reading (3.28); attending University sports events (3.26); TV (2.69); and attending University concerts and plays (2.66).

Participation Outside: listening to music (4.43); bicycling (3.53); TV (3.55); traveling for pleasure (3.17); movies (3.18); attending sports events (3.04); going to dances (2.93); swimming (2.80); and tennis (2.75).

Raymond College

The recreational activities Raymond College students desired most were comparable to those they

participated in most outside the University.

Desire: listening to music (3.78); traveling for pleasure (3.70); attending concerts, plays (3.39); bicycling (3.31; 3.09); movies (3.13); and swimming (2.91).

Participation University: library: reading (3.61); and bicycling (2.83).

Participation Outside: listening to music (4.78); traveling for pleasure (3.82); bicycling (3.48); movies (3.09); attending concerts, plays (2.96); and swimming (2.91; 2.91).

Callison College

Callison College students showed a high degree of desire and participation outside the University.

Desire: listening to music (4.27); attending concerts, plays (3.78); swimming (3.80); bicycling (3.80; 3.73); traveling for pleasure (3.73); and crafts (3.60).

Participation University: library: reading (3.73); attending University concerts, plays (3.40); and Anderson Y: films (2.87).

Participation Outside: listening to music (4.73); bicycling (4.13); swimming (3.47; 3.33); TV (3.20); and attending concerts and plays (3.20).

Elbert Covell College

Students of Elbert Covell College displayed a high degree of desire and participation outside the University.

Desire: traveling for pleasure (3.88); listening to music (3.81); attending concerts, plays (3.68); movies (3.68); attending sports events (3.56); and going to dances (3.56).

Participation University: library: reading (3.44); attending University sports events (3.07); Anderson Y: films (2.88); and attending University concerts and plays (2.81).

Participation Outside: listening to music (4.50); going to dances (3.69); TV (3.56); traveling for pleasure (3.56); movies (3.50); attending sports events (3.38); and swimming (3.00; 2.88).

School of Education

Education students also displayed a high degree of desire and participation outside the University.

Desire: attending concerts, plays (3.79); movies (3.72); traveling for pleasure (3.76); bicycling (3.52; 3.38); listening to music (3.38); attending sports events (3.45); going to dances (3.31); and tennis (3.00).

Participation University: library: reading (3.31); and attending University sports events (3.07).

Participation Outside: listening to music (4.45); traveling for pleasure (3.62); TV (4.17); sewing or homemaking (3.26); and bicycling (3.45).

School of Engineering

Engineering students showed the least participation through the University than any other school of study.

Desire: tennis (3.33); going to dances (3.07); table tennis (3.07); bicycling (2.93); traveling for pleasure (2.87); and waterskiing (2.87).

Participation University: attending University sports events (2.47).

Participation Outside: listening to music (3.67); TV (3.27); tennis (2.87); and attending sports events (2.87).

Conservatory of Music

Students of the Conservatory of Music expressed the greatest desire and participation in musical activity.

Desire: musical instruments (4.74); attending concerts, plays (3.87); swimming (3.80); bicycling (3.80; 3.73); traveling for pleasure (3.73); and crafts (3.60).

Participation University: music lessons (4.29); attending University concerts, plays (4.05); and attending University sports events (2.81).

Participation Outside: listening to music (4.75); musical instruments (4.67); attending concerts, plays (3.91); TV (3.14); bicycling (3.05); and movies (3.00).

School of Pharmacy

Pharmacy students indicated low scores for desire to participate, and actual participation through and outside the University of the Pacific.

Desire: listening to music (3.26); traveling for pleasure (2.89); TV (2.85); and movies (2.74).

Participation University: library: reading (2.74).

Participation Outside: listening to music (3.89); TV (3.57); bicycling (2.97); and traveling for pleasure (2.74).

Results of the computed mean scores showed similarity among the least popular recreational activities for the total student sample, as indicated below.

1) Least Desired: water polo (1.34); diving (1.59); judo ((1.60); rowing (1.61); karate (1.67); soccer (1.70); golf (1.71); and gymnastics (1.72; 1.74).

2) Least Participation University: aikido (1.08); cross country skiing (1.10); rowing (1.10); judo (1.13); scuba diving (1.13); fencing (1.14); Newman Center (1.14; 1.18; 1.40); karate (1.16); gymnastics (1.20); yoga (1.23); soccer (1.25); golf (1.25; 1.25); sailing (1.26); handball (1.31); use of the Y.M.C.A. (1.32); and horseback riding (1.37).

3) Least Participation Outside: aikido (1.08); judo (1.11); fencing (1.12); water polo (1.15); karate (1.21); rowing (1.21); cross country skiing (1.22), scuba diving (1.24); archery (1.25); yoga (1.27); surfing (1.31); and marksmanship (1.35).

Students' mean scores for all recreational opportunities listed in the questionnaire are reported in Table III (Appendix D). Also shown, are the means by

which the recreational opportunities were offered through the University of the Pacific.

Summary

The sample population for this study consisted of 305 undergraduate students from the eight cluster colleges that compose the University of the Pacific. This represented an 8.5 percent sample of the total undergraduate population of the University of the Pacific.

The data received from students' response questionnaires were computed to determine mean scores, the 95 percent confidence intervals of the means, and T score values in order to compare the listed recreational opportunities in the three sections of the questionnaire. The following results were found:

- 1) Students expressed a significantly greater degree of desire to participate in recreational opportunities, if they were offered through the University of the Pacific, than their degree of actual participation in recreational opportunities through the University. All t-ratios were found to be significant at the .01 level.

- 2) Students expressed a significantly greater degree of participation in recreational opportunities outside the University of the Pacific, than their degree of participation in recreational opportunities through the University. All t-ratios (excluding eight activities) were significant at the .05 or .01 level.

3) Similarity was found among each cluster college in students' highest mean scores for the listed recreational opportunities in each selection of the questionnaire. Recreational opportunities which received the highest mean scores in each of the three areas are noted below.

a) Desire: listening to music (3.61); traveling and sightseeing for pleasure (3.33); attending movies (3.31); attending concerts, plays (3.26); bicycling (3.17; 3.02); going to dances (3.02); tennis (2.85); watching TV (2.84); and swimming (2.65).

b) Participation University: library reading (3.15); attending University sports events (2.83); and attending University concerts and plays (2.57).

c) Participation Outside: listening to music (4.36); watching TV (3.52); bicycling (3.35); attending movies (3.01); attending sports events (2.76); swimming (2.77; 2.70); attending concerts, plays (2.72); and going to dances (2.66).

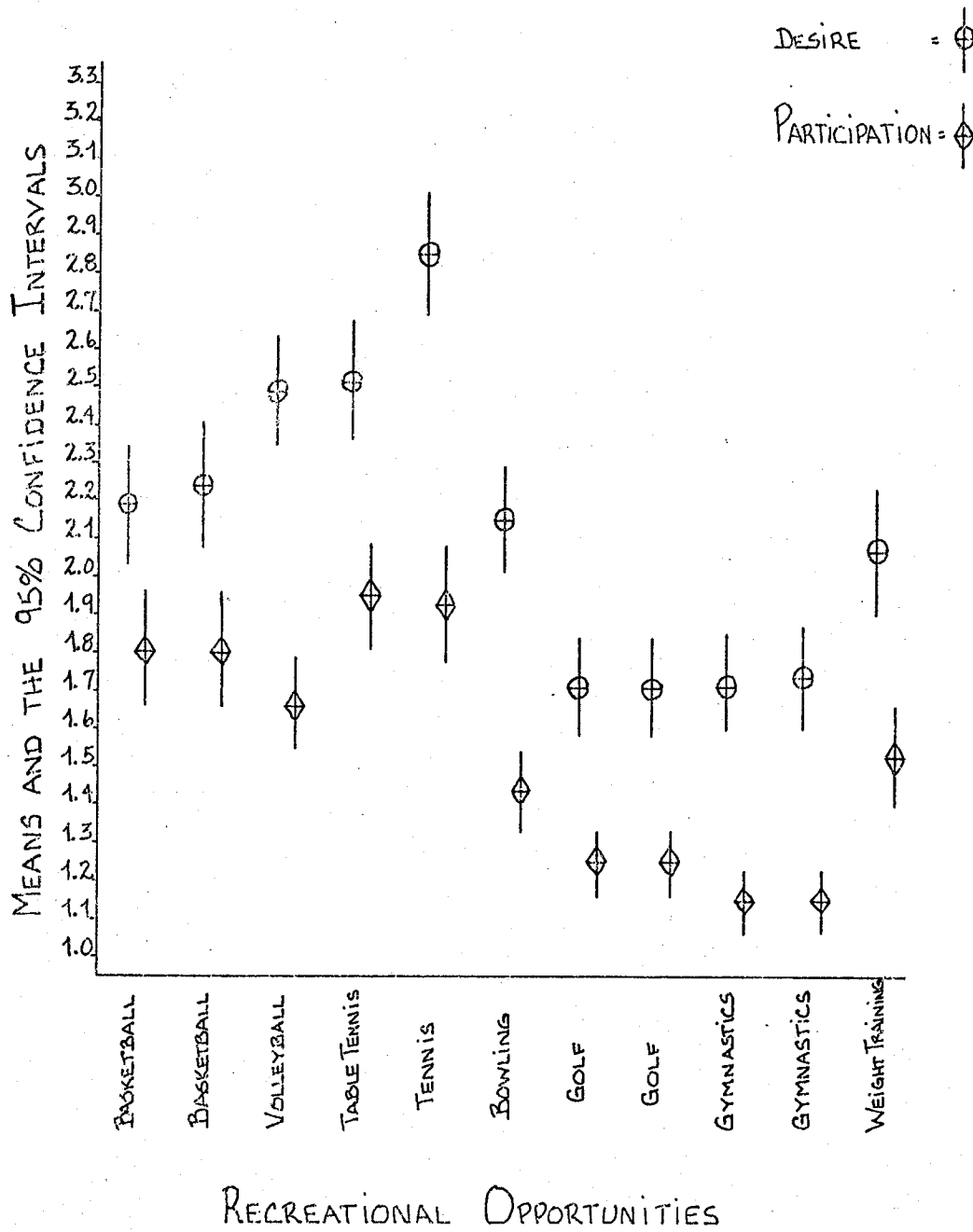
4) Students' mean scores expressed student agreement among those recreational opportunities least desired or participated in.

5) Students' personal comments within the questionnaire revealed an awareness by most students of the recreational opportunities offered through the University. However, a number of students were unaware

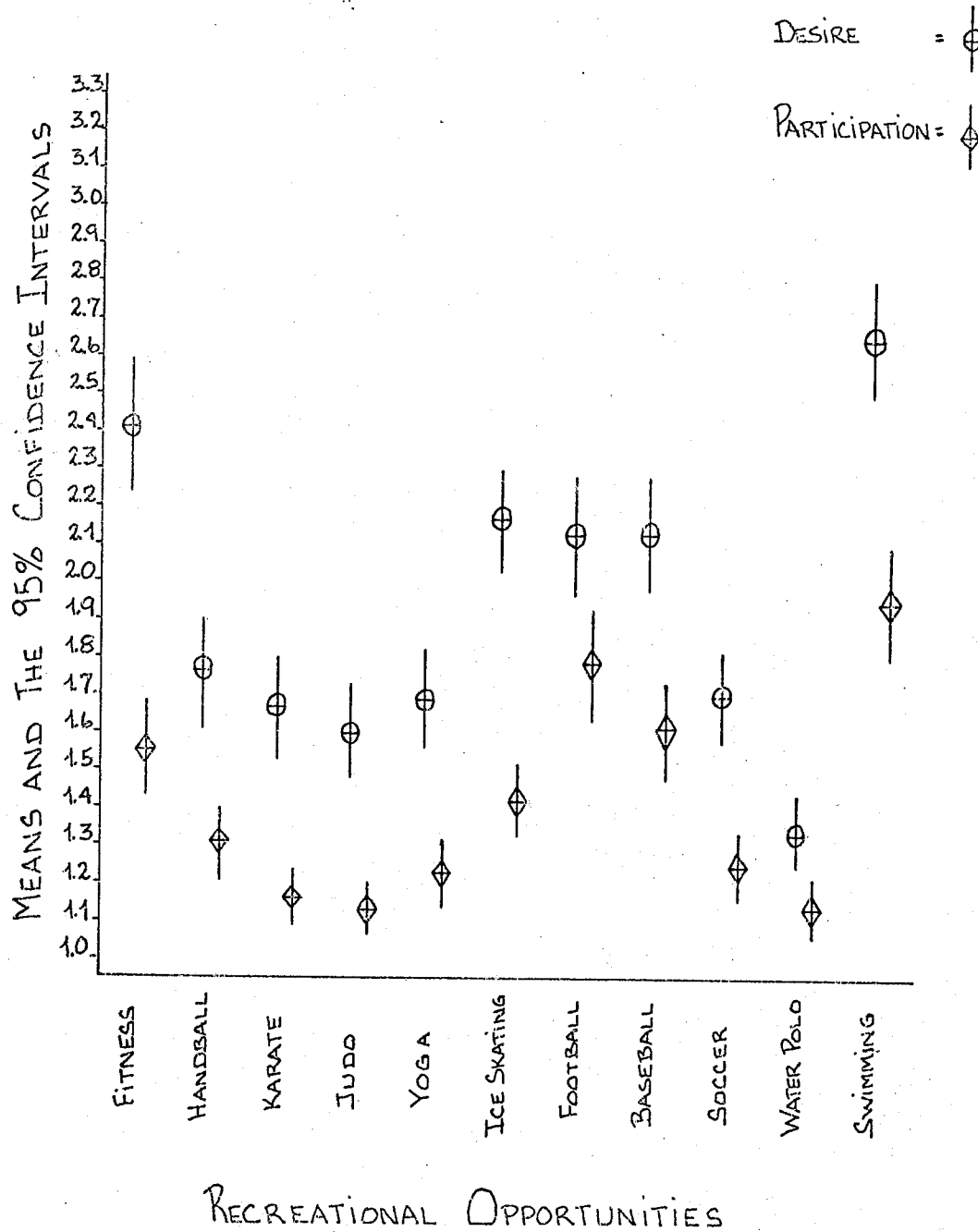
of the Newman Center, use of the Y.M.C.A., sailing, and Anderson Y: rowing.

6) Mean scores were computed for a general profile of the student sample, denoting a) age: 20.8 years and sex: 1.52 (1=male; 2=female); b) year in school: 2.61 (2=sophomore; 3=junior); c) marital status: 1.09 (1=single; 2=married); and, d) residence: 1.45 (1=on campus; 2=off campus).

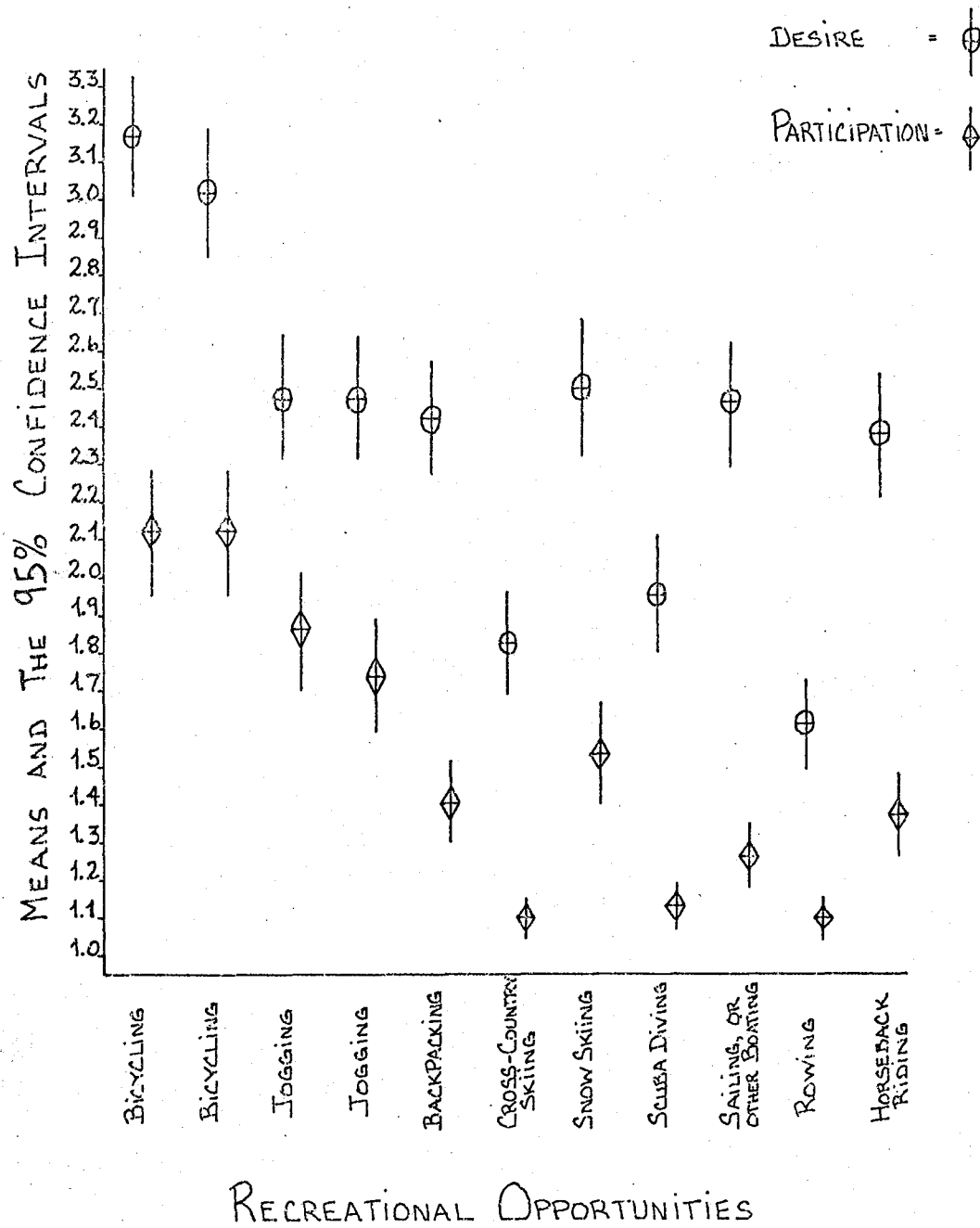
STUDENT'S DEGREE OF DESIRE AND PARTICIPATION IN RECREATIONAL OPPORTUNITIES



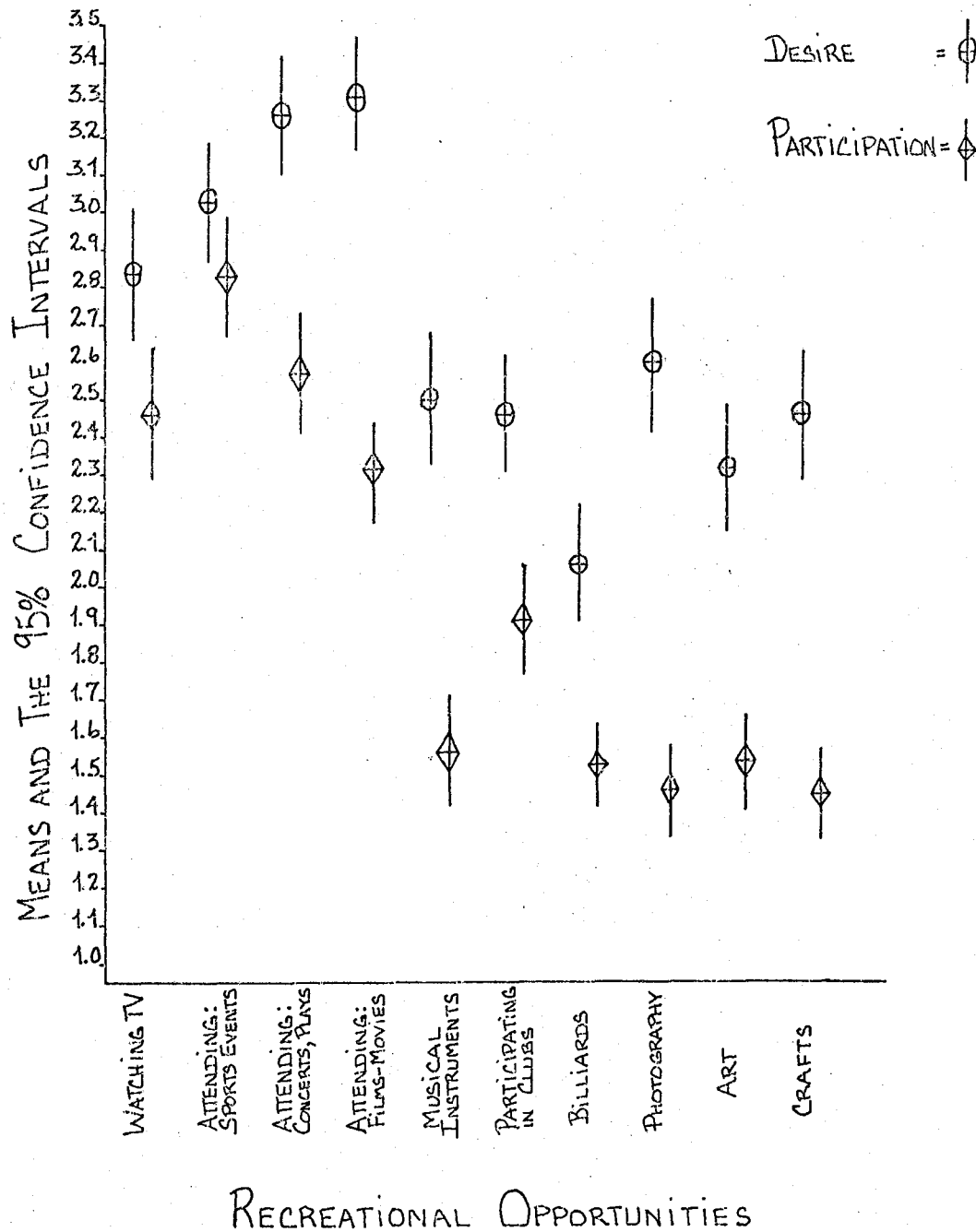
STUDENT'S DEGREE OF DESIRE AND PARTICIPATION IN RECREATIONAL OPPORTUNITIES



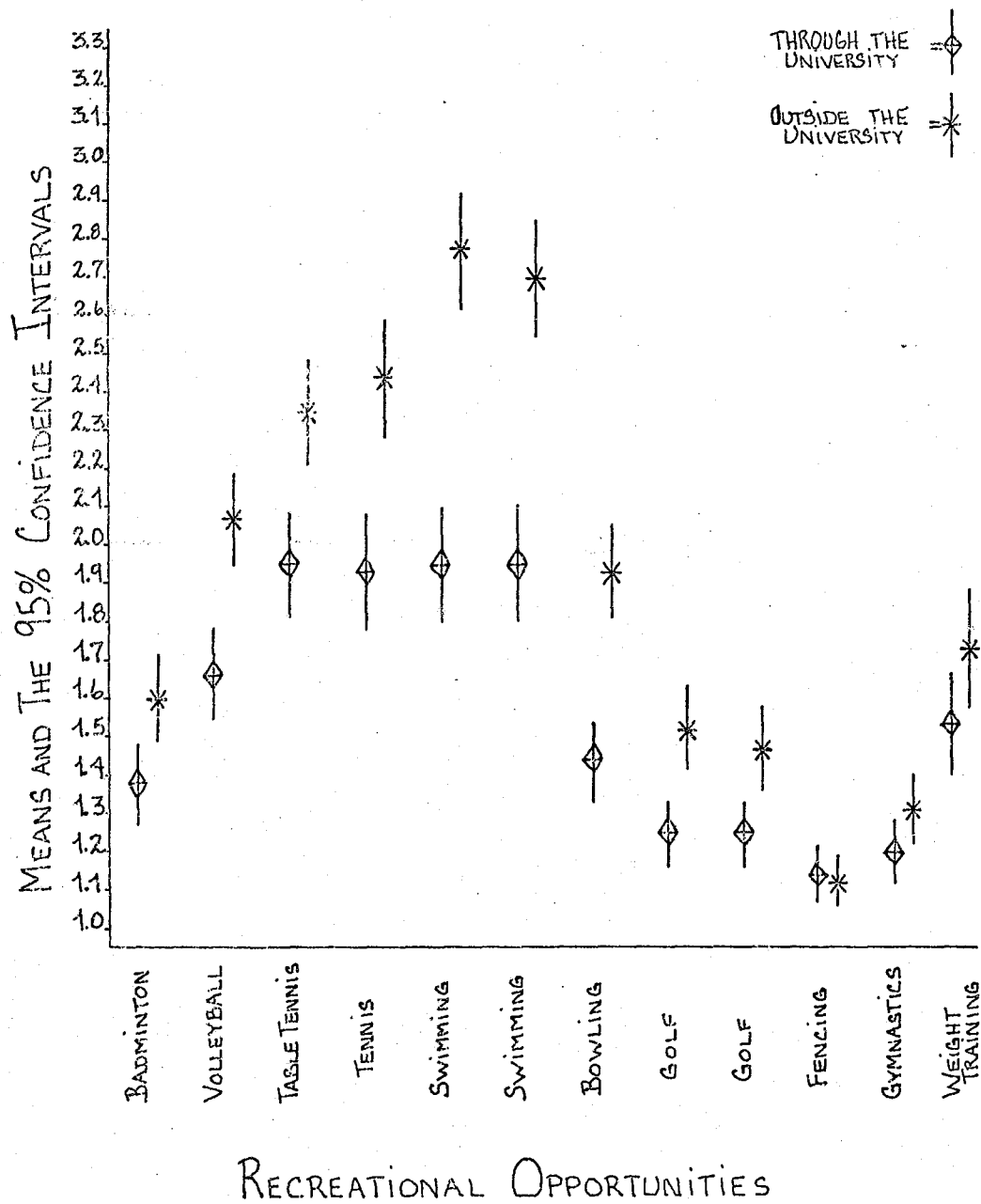
STUDENT'S DEGREE OF DESIRE AND PARTICIPATION IN RECREATIONAL OPPORTUNITIES



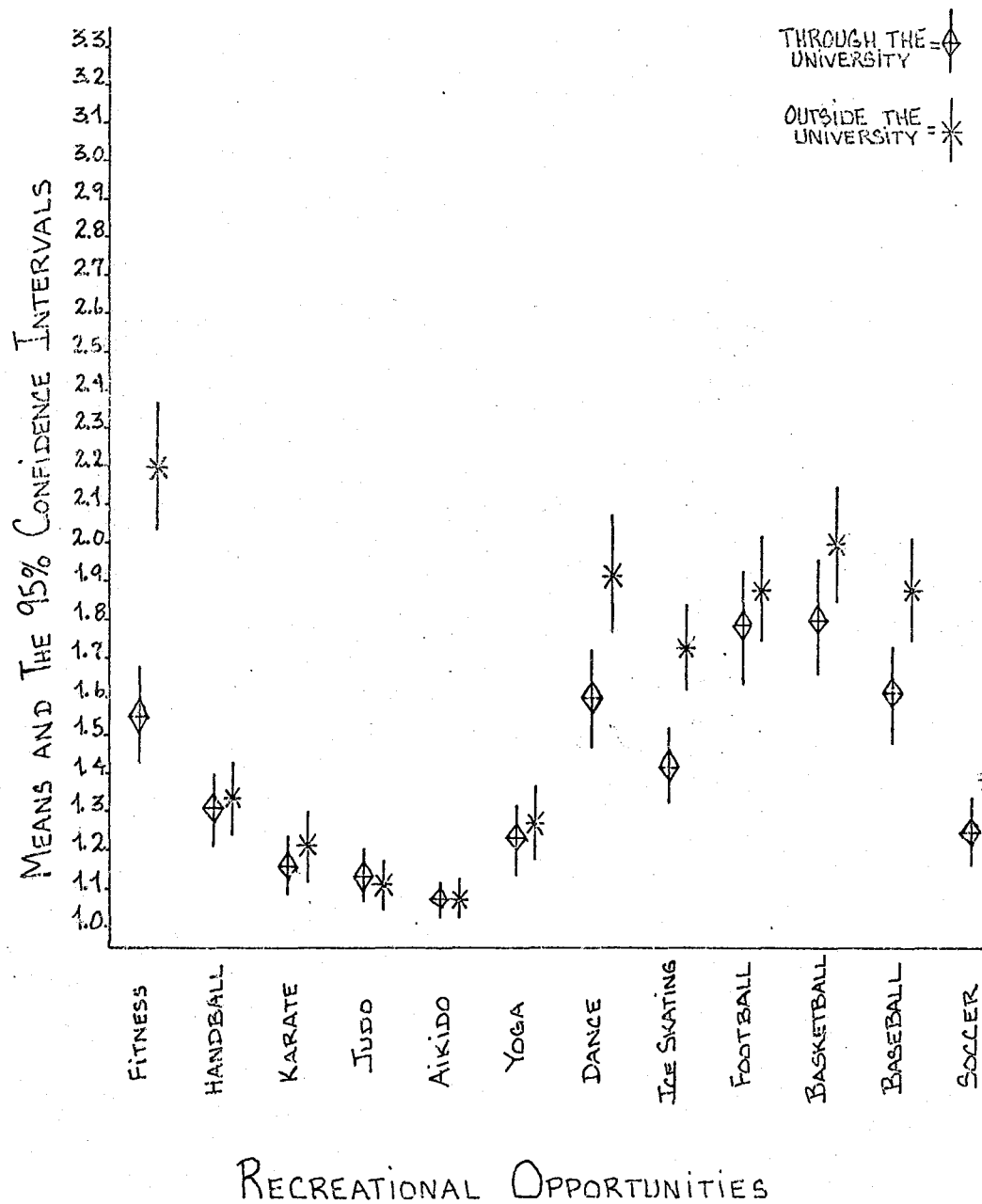
STUDENT'S DEGREE OF DESIRE AND PARTICIPATION IN RECREATIONAL OPPORTUNITIES



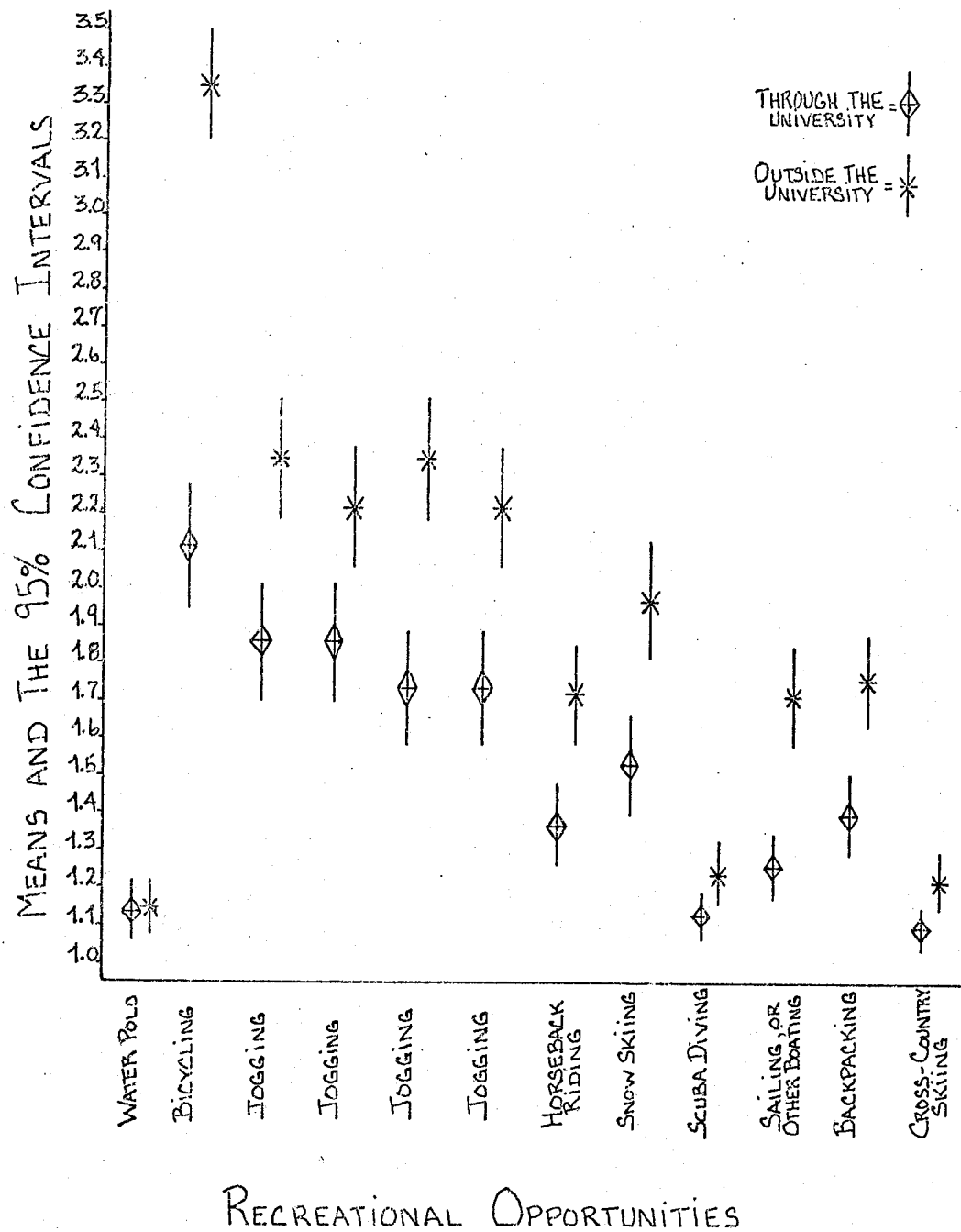
STUDENT'S DEGREE OF PARTICIPATION IN RECREATIONAL OPPORTUNITIES THROUGH THE UNIVERSITY, AND PARTICIPATION OUTSIDE THE UNIVERSITY



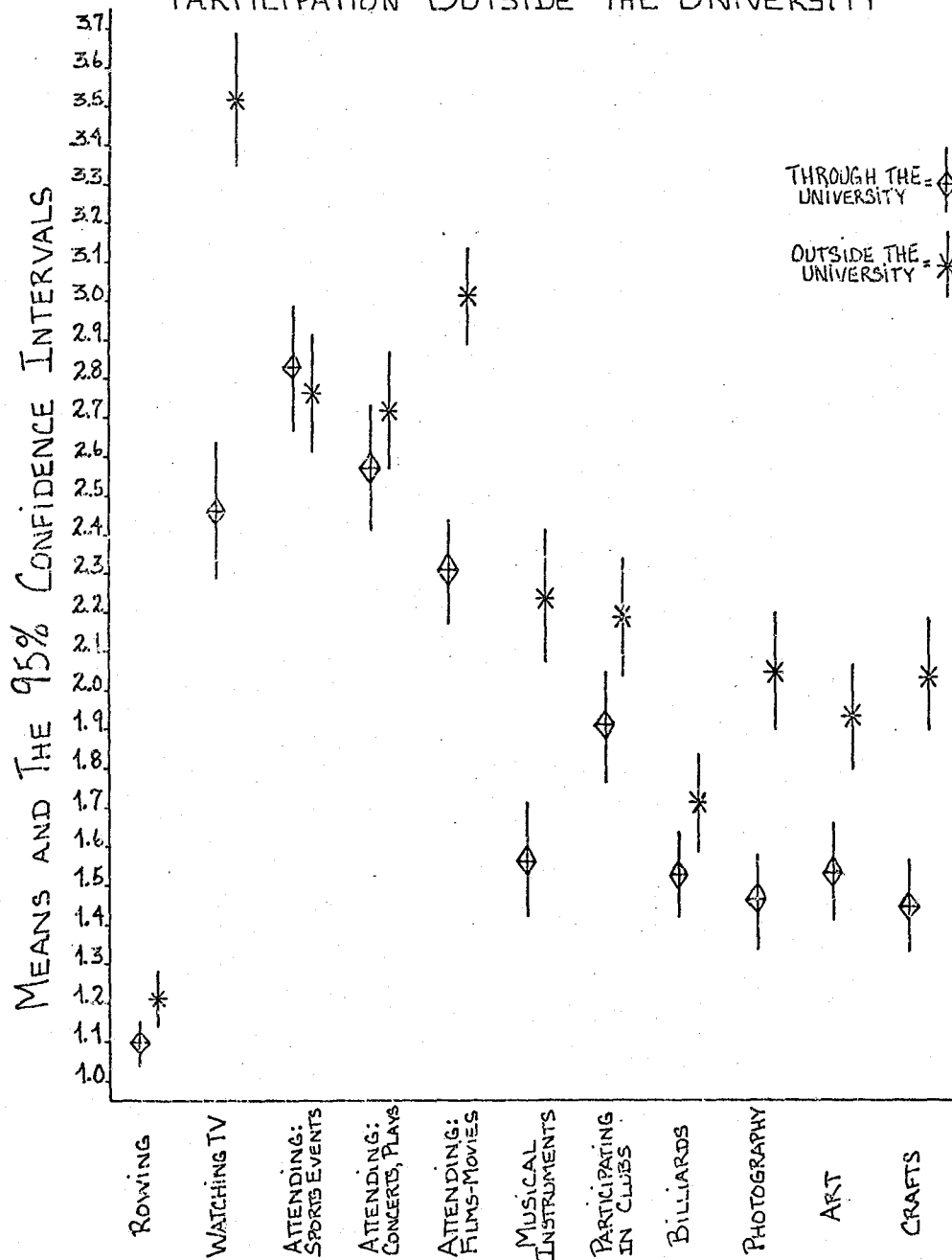
STUDENTS' DEGREE OF PARTICIPATION IN RECREATIONAL OPPORTUNITIES THROUGH THE UNIVERSITY, AND PARTICIPATION OUTSIDE THE UNIVERSITY



STUDENT'S DEGREE OF PARTICIPATION IN RECREATIONAL OPPORTUNITIES THROUGH THE UNIVERSITY, AND PARTICIPATION OUTSIDE THE UNIVERSITY

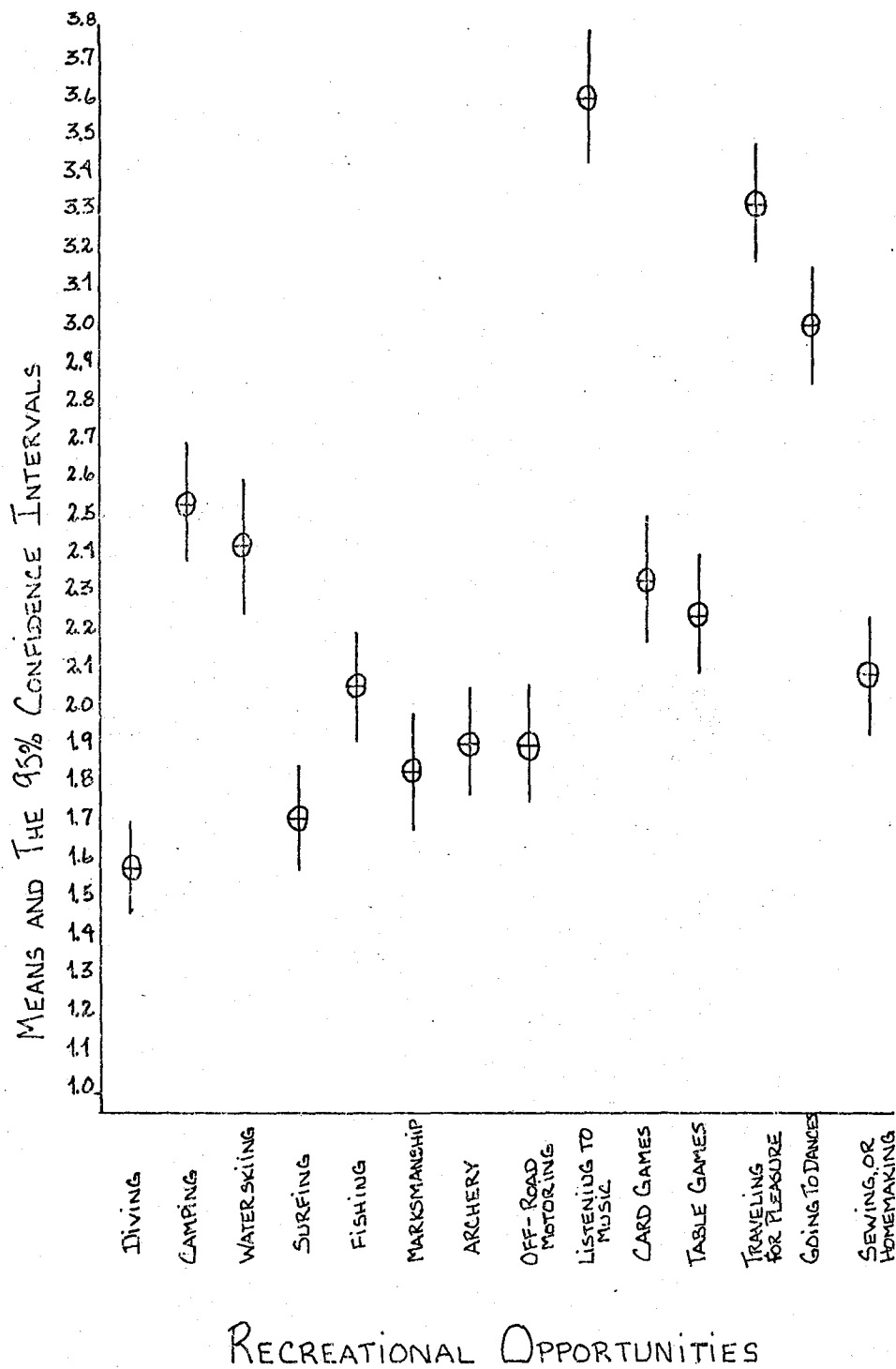


STUDENT'S DEGREE OF PARTICIPATION IN RECREATIONAL OPPORTUNITIES THROUGH THE UNIVERSITY, AND PARTICIPATION OUTSIDE THE UNIVERSITY

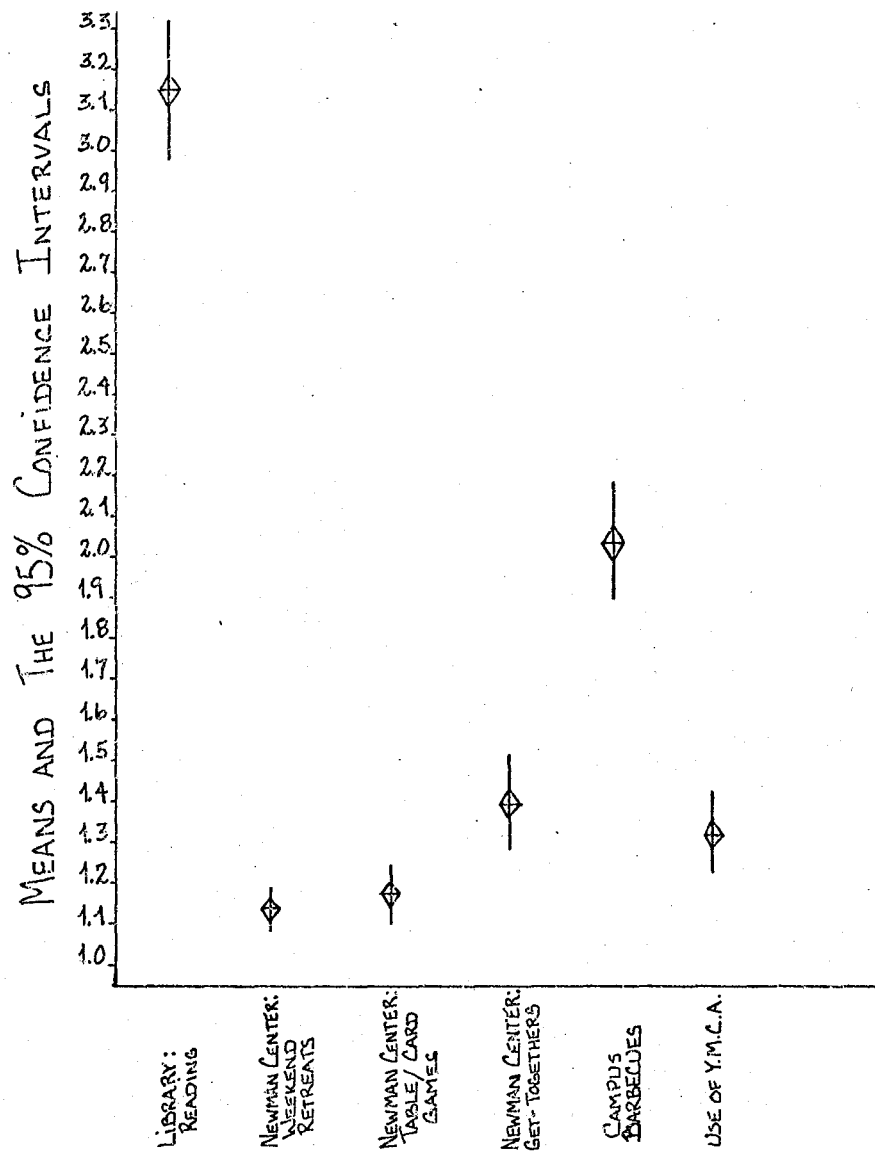


RECREATIONAL OPPORTUNITIES

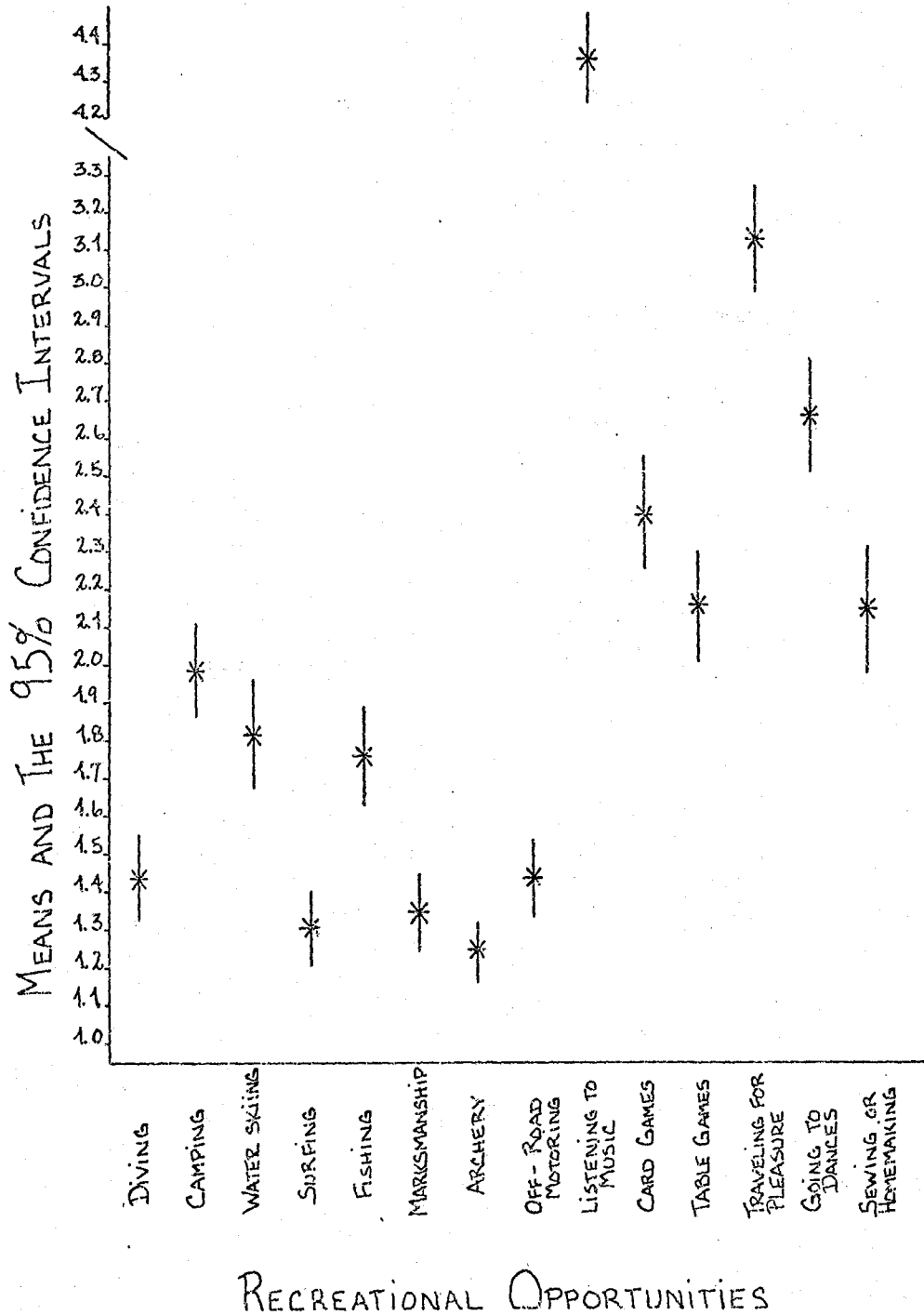
STUDENT'S DEGREE OF DESIRE TO PARTICIPATE IN RECREATIONAL OPPORTUNITIES



STUDENT'S DEGREE OF PARTICIPATION IN RECREATIONAL OPPORTUNITIES



STUDENT'S DEGREE OF PARTICIPATION IN RECREATIONAL OPPORTUNITIES OUTSIDE THE UNIVERSITY



CHAPTER V

SUMMARY, CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

SUMMARY

The Problem

This investigation was undertaken to determine the extent to which current University of the Pacific campus recreational opportunities meet student recreational interests. Several subpurposes were established. Due to inconclusive data in the review of literature, a study hypothesis was not presented. The two hypotheses for this study were stated in null form: 1) There will be no significant difference between students' desire to participate in recreational opportunities and students' degree of actual participation in recreational opportunities sponsored by the University of the Pacific; and 2) There will be no significant difference between students' participation in recreational opportunities sponsored by the University of the Pacific and their participation in recreational opportunities not sponsored by the University of the Pacific. Objectives for this study were presented and several terms were defined.

A review of literature revealed recent information, exemplifying the recreational opportunities

available at California colleges similar in size and/or enrollment to the University of the Pacific. Also discussed was research dealing with the positive recruiting force of college recreation programs, and the role of higher education in adult recreational activity.

Procedures

A questionnaire containing selected recreational opportunities to be rated on a five point scale for desire and participation was administered during the Fall semester, 1974, in nineteen randomly-selected theory classes, representing 383 students. The final sample consisted of 305 undergraduate students; students registered as graduate students were not considered; students returning questionnaires with unanswerd sections were insufficient for analysis; and, in keeping within the bounds of an eight percent sample from each cluster college, students' questionnaire responses were randomly drawn for elimination.

Each student within the sampled theory classes completed the questionnaire immediately and returned it for statistical analysis. Statistical analysis included the computation of mean scores, the standard error of the mean, the 95 percent confidence interval of the mean, a t-test, Pearson product moment corre-

lation coefficients (Roscoe, 1969, p.97), and the point biserial correlation (Roscoe, 1969, p. 114).

Results

A general profile of University of the Pacific sampled population was developed by computing the mean scores of selected factors: age, sex, year in school, marital status, and residence on or off the University campus.

Comparisons were made between students' degree of desire to participate in recreational opportunities, if they were offered through the University of the Pacific and their degree of actual participation in recreational opportunities through and outside the University of the Pacific. Separate mean scores, standard error of the mean, and the 95 percent confidence intervals of means were computed for each recreational activity item contained in the questionnaire. A visual comparison between students' mean scores for individual activity items was illustrated in various graphs, pages 45-55, and charts (see Appendix D).

T-ratios were computed for further analysis of students' scores between the three sections of the questionnaire. Establishing the .05 level of significance for hypotheses testing, t-ratios of 1.972 or greater were necessary for the difference between the means to be considered significant. All t-ratios between

students' degree of desire to participate in recreational opportunities and their degree of participation in recreational opportunities through the University of the Pacific were significant at the .01 level; t-ratios of 2.601 or greater were achieved. The t-ratios between students' degree of participation in recreational opportunities outside the University of the Pacific and their degree of participation through the University (excluding eight activities) were significant at the .05 and .01 level. Based on the findings, the null hypotheses were rejected

For each cluster college, separate profiles displayed the highest mean scores for the recreational opportunities contained in each section of the questionnaire. Also illustrated, were those recreational opportunities desired and participated in least by the total sample.

CONCLUSIONS

The results of this investigation have been presented and the following conclusions are set forth:

- 1) Due to a significant difference at the .01 level between students' mean scores for their desire to participate in recreational opportunities and their actual participation through the University sponsored programs, it was concluded that students

expressed a greater desire to participate in recreational opportunities if they were offered through the University of the Pacific, than their actual participation in recreational opportunities through the University sponsored programs.

(2) Due to a significant difference at the .05 and .01 level between students' mean scores (excluding eight activities) for their degree of participation in recreational opportunities outside, or not sponsored by the University and their degree of participation through the University sponsored programs, it was concluded that students expressed a greater degree of participation in recreational opportunities not sponsored by the University of the Pacific, than their degree of participation in recreational opportunities sponsored by the University of the Pacific.

DISCUSSION

Analysis of students' t-ratios demonstrated a significant difference between the mean scores for students' desire to participate in recreational opportunities and their actual participation in recreational opportunities through the University sponsored programs; and, students' participation in recreational opportunities through the University sponsored programs and their

participation in recreational opportunities not sponsored by the University of the Pacific. The t-ratios were significant at the .05 and .01 level, thus the null hypotheses for this study were rejected (see Tables I and II, pp. 32-35).

Further examination of students' mean scores showed similarity between students' most popular recreational activities. The following recreational opportunities represented those activities desired and participated in most outside the University of the Pacific: listening to music; traveling and sightseeing for pleasure; bicycling; attending movies, sports events, and concerts and plays; watching TV; going to dances; swimming; and, tennis.

Those recreational opportunities participated in most through the University sponsored programs included: library reading and, attending University sports events, concerts and plays.

Those recreational opportunities regarded as most popular may be influenced by a variety of factors: (1) students accessibility to the activities; (2) personal interest; (3) childhood background or previous experiences (Yoesting & Burkhead, 1973); (4) feasibility (time, season, climate); and, (6) education (Kenyon, 1964; Burdge, 1969; Lindsay and Ogle, 1972; Christensen & Yoesting, 1973).

The data obtained from this investigation indicated that students participate outside the University of the Pacific in those recreational opportunities desired most. Although participation through the University sponsored programs provided for recreational skills, the results of this study indicated that individuals appeared to prefer leisure pursuits through more unorganized offerings. A majority of the most popular recreational opportunities desired and participated in outside the University sponsored programs may be engaged in during the evening hours, in one's living quarters, or near the University campus: listening to music, attending movies, sports events, and concerts and plays; watching TV; and, going to dances. The outdoor activities may be engaged in during brief time intervals: bicycling to classes, or a friend's home; swimming in one's leisure time; and, playing tennis for an hour after dinner, or on the weekends.

The University of the Pacific has on-going plays and seasonal football, basketball, baseball, and other sports events for students to attend in the late afternoons, or evenings. Reading at the University library clearly received students' greatest participation, achieving a mean score of 3.15 on the five point scale.

Students expressed the following recreational opportunities as those desired and yet participated in least: aikido; karate; judo; water polo; soccer; Newman Center; fencing; rowing; cross country skiing; scuba diving; diving; gymnastics; sailing; golf; handball; surfing; archery; use of the Y.M.C.A.; marksmanship; and, horseback riding (see Results, p.41). Mean scores of 1.35 and lower were indicated on a scale of 5. These findings may also be affected by a variety of factors: (1) students' awareness; (2) extent of activities' availability; (3) time factor; (4) the time of year, season, or climate preferred most for participation; (5) personal disinterest; and (6) physical demands for participation.

Many students, particularly engineering and pharmacy students, made verbal comments during the testing period, stating a lack of time, or desired time to participate in the recreational opportunities due to their class schedules. With a great deal of students' day time taken up in classes, it was understood why a majority of these recreational opportunities were least participated in. Water polo and soccer were offered only through intercollegiate athletics, although the former will be available as an activity class beginning the Fall of 1975. Examination of the Fall 1974 Call Schedule revealed the limited frequency of activities' availability:

horseback riding, Monday 3:30-5:30p.m.; sailing, Tuesday 3-5:00p.m.; fencing, Monday and Wednesday 1:00p.m.; and judo, Tuesday and Thursday 7:00p.m.

The University of the Pacific's facilities for recreational use are limited. The existence of only one gymnasium necessitates a strict scheduling of its activities; for example, on a seasonal basis, intramurals occupies the gym every weekday evening from 7:00 to 11:30p.m. (Sutton, 1975); and, one handball court restricts students' use. A variety of the arts and crafts classes are limited, with first choice extended to art majors. Rowing is no longer organized through the Anderson Y (Israel, 1975). Surfing, archery, and marksmanship are not offered through the University; archery has been available as an activity class in the past, although it was dropped, one of the reasons being a lack of student participation (Albaugh, 1975). Cross country skiing has recently been organized by the University's Nordic Club, and sailing added to the Class Schedule.

The California State-directed colleges similar in student population to the University of the Pacific possessed a greater scope of facilities and services than the University of the Pacific (Winford, 1975). If the University of the Pacific wishes to expand the recreational opportunities to the level of the

State-directed colleges, it will require additional facilities and instruction. However, students' lack of participation at the University of the Pacific may indicate that increased frequency of recreational activities' availability is not warranted.

The University of the Pacific, Fall of 1974, completed the construction of the new University Center including a game room (pool tables, pin ball, and table tennis), and an arts and crafts facility. New clubs have also been organized through the University: lacrosse, parachuting, and ice hockey.

RECOMMENDATIONS

It was hoped that this investigation would afford individuals a greater awareness of the recreational opportunities at the University of the Pacific, and of students' desires and engagement in selected recreation.

Based upon the results and implication of this study, recommendations were made for the University of the Pacific, and further research.

- 1) It is not possible to offer all the recreational opportunities desired by students, however, added club programs sponsored by the University of the Pacific could enhance leisure pursuits; for example, clubs for bowling, badminton, bicycling, and table tennis.

- 2) Increase the availability of recreational activity classes during the evening hours.

3) Maximize the use of the arts and crafts facility in the new University Center, providing instruction for numerous arts and crafts classes. Expanding offerings for this type of recreation could provide a well-rounded program coinciding with the present sports program. It would also compare more closely to the programs at California State-directed colleges. Classes such as weaving, knitting, rug making, batik, silk screening, leather work, macrame, decoupage, ceramics, metal work, and cooking are offered on a more comprehensive basis at California State-directed colleges.

4) Additional instruction and organization could be arranged through the use of talented students, professors, or volunteers. Co-ordination through the City Recreation Department could possibly afford periodical instruction.

5) As accumulative data illustrated students' expressed recreational desires and participation, additional research on the relationship of sexes might reveal significant differences as to their recreational interests and needs.

6) Data obtained from two recent surveys (see Chapter II, pp. 6-11) broadened insights into the recreational opportunities and facilities at California colleges and universities. Research

investigating the percentage of student recreational participation in proportion to student enrollment, might reveal significant patterns in participation when comparing State-directed colleges and private universities in California.

REFERENCES

REFERENCES

- Albaugh, G. Personal communication, April 16, 1975.
- Bowers, T.A., & Pugh, R.C. A comparison of factors underlying college choice by students and parents. Presented to the American Educational Research Association, Chicago, April 3-7, 1972.
- Burdge, R.J. Levels of occupational prestige and leisure activity. Journal of Leisure Research, 1969, 1 (3), 262-274.
- Butler, G.D. Introduction to community recreation. New York: McGraw-Hill, 1967.
- Christensen, J.E., & Yoesting, D.R. Social and attitudinal variants in high and low use of outdoor recreational facilities. Journal of Leisure Research, 1973, 5(2), 6-15.
- Clarke, A.C. Use of leisure and its relations to levels of occupational prestige. American Sociological Review, 1956, 21(3), 301-307.
- DeGrazia, S. Of time, work, and leisure. New York: Twentieth Century Fund, 1962, 468-469.
- Dowell, L.J. Recreational pursuits of selected occupational groups. Research Quarterly, 1967, 38(4), 719-722.
- English, H.B., & English, A.C. A comprehensive dictionary of psychological and psychoanalytical terms. New York: David McKay Company, Inc., 1958.

- Gray, D., & Pelegrino, D.A. Reflections on the recreation and park movement. Wm. C. Brown Company Publishers, 1973.
- Grove, P.B. (Ed.). Webster's third new international dictionary (unabridged). Springfield: G. & C. Merriam, 1961.
- Hopkins, B. Personal communication, September 26, 1975.
- Israel, V. Personal communication, April 22, 1975.
- Kaplan, M. The use of leisure. In C. Tibbitts (Ed.), Handbook of Social Gerontology. Chicago: University of Chicago Press, 1960, 407-443.
- Kenyon, G.S. The significance of adult physical activity as a function of age, education, and socio-economic status. Paper presented at the Midwest Convention of the American Association for Health, Physical Education, and Recreation, Detroit, April 11, 1964.
- Kraus, R. Recreation today: Program planning and leadership. New York: Appleton-Century-Crofts, 1966.
- Kraus, R. Recreation and leisure in modern society. New York: Appleton-Century-Crofts, 1971.
- Lindsay, J., & Ogle, R.A. Socio-economic patterns of outdoor recreation use near urban areas. Journal of Leisure Research, 1972, 4(1), 19-24.
- Miller, N.P., & Robinson, D.M. The leisure age. Belmont, Calif.: Wadsworth Publishing Company, Inc., 1969.

Power, E.J. Education for american democracy. New York: McGraw-Hill, 1965.

Reissman, L. Class, leisure, and social participation. American Sociological Review, 1954, 19, 76-84.

Richards, J.M., Jr., & Holland, J.L. A factor analysis of student explanations of their choice of a college. Iowa City, Iowa: American College Testing Program, October, 1965. Washington D.C.: U.S. Department of Health, Education, and Welfare.

Roscoe, J.T. Fundamental research statistics for the behavioral sciences (2nd ed.). New York: Holt, Rinehart and Winston, Inc., 1969.

Southern California Research Council. The challenge of leisure: A southern california case study (Report No. 15). Pomona College, Claremont, Calif., 1967.

Terte, R.H. Freshman rank social life first. New York Times, October 29, 1964, p. 37.

White, R.C. Social class differences in the uses of leisure. American Journal of Sociology, 1954, 19, 76-84.

Winford, J. Personal communication with author, June 18, 1974.

Winford, J. Personal communication with author, October, 1975.

Yoesting, D.R., & Burkhead, D.L. Significance of childhood recreation experience on adult leisure behavior: An exploratory analysis. Journal of

Leisure Research, 1973, 5(1), 25-35.

Zborowski, M., & Eyde, L.D. Aging and social participation. Journal of Gerontology, 1962, 17, 424-430.

APPENDIX A

CALIFORNIA PRIVATE COLLEGE SURVEY QUESTIONNAIRE

Recreation Department
University of the Pacific
Stockton, California

I am a graduate student at the University of the Pacific trying to gather information from various colleges and universities in California, concerning the available recreational opportunities for its students. Your college has been selected due to its similarity in size and/or enrollment to the University of Pacific.

On the following page is a list of recreational opportunities offered at U.O.P. that I have compiled from different sources.

Your providing information will be greatly appreciated. Allowing my list to serve as a guide, please check those activities you offer and the means by which they are offered (class activity, club or organization and so on). Also, please add any extra activities you have that I have not included.

Due to a time factor, please return by November 5, 1974.

Thank you.

Send information to:

Paige Boynton
c/o Dr. Connor Sutton
Physical Education and Recreation Dept.
University of the Pacific
Stockton, California 95204

The following recreational opportunities are currently offered through the University of the Pacific. Allowing this list to serve as a guide, please check those recreational opportunities offered by your university indicating the means by which they are provided. Please add any additional activities you offer that I have not included in this list.

<u>SPORT ACTIVITIES</u>	<u>Class Activity</u>	<u>Club / Organization</u>	<u>Living Arrangement</u>	<u>Intramural</u>	<u>Intercollegiate</u>	<u>Associated Student Body</u>	<u>Not Offered</u>
Badminton	1	2	3	4	5	6	7
Volleyball	1	2	3	4	5	6	7
Tennis	1	2	3	4	5	6	7
Table Tennis	1	2	3	4	5	6	7
Bowling	1	2	3	4	5	6	7
Golf	1	2	3	4	5	6	7
Fencing	1	2	3	4	5	6	7
Gymnastics	1	2	3	4	5	6	7
Weight Training	1	2	3	4	5	6	7
Men/Women's Fitness	1	2	3	4	5	6	7
Handball	1	2	3	4	5	6	7
Karate	1	2	3	4	5	6	7
Judo	1	2	3	4	5	6	7
Aikido	1	2	3	4	5	6	7
Yoga	1	2	3	4	5	6	7
Dance (Folk, Modern)	1	2	3	4	5	6	7
Ice Skating	1	2	3	4	5	6	7
Football/Flag Football	1	2	3	4	5	6	7
Basketball	1	2	3	4	5	6	7
Baseball/Softball	1	2	3	4	5	6	7
Soccer	1	2	3	4	5	6	7
Water Polo	1	2	3	4	5	6	7
Swimming	1	2	3	4	5	6	7
Other sport activities:							
1.	1	2	3	4	5	6	7
2.	1	2	3	4	5	6	7
3.	1	2	3	4	5	6	7
4.	1	2	3	4	5	6	7

ACTIVE OUTDOOR RECREATION

	CLASS	CLUB	LIVING ARRANGEMENT	INTRAMURAL	INTERCOLLEGIATES	ASSOCIATED STUDENT BODY	NOT OFFERED
Bicycling	1	2	3	4	5	6	7
Jogging	1	2	3	4	5	6	7
Horseback Riding	1	2	3	4	5	6	7
Snow Skiing	1	2	3	4	5	6	7
Scuba Diving	1	2	3	4	5	6	7
Sailing	1	2	3	4	5	6	7
Backpacking	1	2	3	4	5	6	7
Cross Country Skiing	1	2	3	4	5	6	7
Rowing	1	2	3	4	5	6	7

OTHER RECREATION

Billiards	1	2	3	4	5	6	7
Campus Sports Events	1	2	3	4	5	6	7
Campus Concerts, Plays	1	2	3	4	5	6	7
Campus Films	1	2	3	4	5	6	7
Participation in Clubs	1	2	3	4	5	6	7
Music Lessons	1	2	3	4	5	6	7
Photography	1	2	3	4	5	6	7
Newman Center:							
Weekend Retreats	1	2	3	4	5	6	7
Room for table/card games	1	2	3	4	5	6	7
Get-togethers	1	2	3	4	5	6	7
Campus dances	1	2	3	4	5	6	7
Campus barbecues	1	2	3	4	5	6	7
Art	1	2	3	4	5	6	7
Crafts	1	2	3	4	5	6	7
Use of Y.M.C.A.	1	2	3	4	5	6	7

Other activities or comments:

1.	1	2	3	4	5	6	7
2.	1	2	3	4	5	6	7
3.	1	2	3	4	5	6	7

APPENDIX B
DATA COLLECTION QUESTIONNAIRE

ORAL INSTRUCTIONS

The questionnaire provided is divided into three parts; these parts were varied in order, so you may not have the same order of sections as the person sitting next to you. Each section of the questionnaire contains a list of recreational opportunities. The sections differ in the following way: One section asks of your desire to participate in the recreational activities listed, if they were offered at the University of the Pacific. Please circle the number indicating your desire to participate in these. At the beginning of each section there is a scale indicating the value of each number (1-5). Please do not leave any blank spaces. This facilitates scoring your answers and analyzing the information.

Another section lists the recreational opportunities currently available at the University. I am interested in your actual participation in these activities. Again, please circle the number illustrating your actual participation in these.

Another section asks of your participation in recreational opportunities outside the University's programs, or what you do on your own. And, as before please circle the number indicating your actual participation in these activities when not sponsored by the University. An example would be, "how often do you get together with a friend and play tennis, on a weekday, or weekend, but not as part of an activity class or program of U.O.P?"

Please list any other activities in which you desire to participate or, in which you actually do engage that I have not given on these lists. I welcome any additional comments you might have.

Also, regard these recreational activities on a yearly basis, or school year, rather than strictly seasonal.

Again, please do not leave any blank spaces.

Does anyone have any questions at this point? Or if you do while filling out the questionnaire, please so indicate by raising your hand.

QUESTIONNAIRE

Please fill in or check the appropriate information.

1. Age _____ Sex _____
2. Year in school _____
3. Major _____
4. Single _____ Married _____
5. Residence: On Campus _____ Off Campus _____
6. School within the University:
 - College of the Pacific _____
 - Raymond College _____
 - Callison College _____
 - Elbert Covell College _____
 - School of Education _____
 - School of Engineering _____
 - Conservatory of Music _____
 - School of Pharmacy _____

If the following recreational activities were offered through the University, to what extent would you desire to participate?

Please circle the correct number, indicating your degree of desire to participate.

- 1 = Never
- 2 = Seldom (1-3 times a year)
- 3 = Occasionally (1-3 times a month)
- 4 = Often (3-6 times a month)
- 5 = Very Often (7 or more times a month)

SPORT ACTIVITIES

Basketball	1	2	3	4	5
Badminton	1	2	3	4	5
Volleyball	1	2	3	4	5
Table Tennis	1	2	3	4	5
Tennis	1	2	3	4	5
Bowling	1	2	3	4	5
Golf	1	2	3	4	5
Gymnastics	1	2	3	4	5
Weight Training	1	2	3	4	5
Fitness	1	2	3	4	5
Handball	1	2	3	4	5
Karate	1	2	3	4	5
Judo	1	2	3	4	5
Yoga	1	2	3	4	5
Dance	1	2	3	4	5
Ice Skating	1	2	3	4	5
Football	1	2	3	4	5
Basketball	1	2	3	4	5
Baseball/Softball	1	2	3	4	5
Soccer	1	2	3	4	5
Water Polo	1	2	3	4	5
Swimming	1	2	3	4	5
Diving	1	2	3	4	5
Gymnastics	1	2	3	4	5

ACTIVE OUTDOOR RECREATION

Bicycling	1	2	3	4	5
Jogging	1	2	3	4	5
Backpacking	1	2	3	4	5
Camping	1	2	3	4	5
Cross Country Skiing	1	2	3	4	5
Snow Skiing	1	2	3	4	5
Waterskiing	1	2	3	4	5
Scuba Diving	1	2	3	4	5
Sailing, or other boating	1	2	3	4	5
Rowing	1	2	3	4	5
Surfing	1	2	3	4	5
Fishing	1	2	3	4	5
Marksmanship	1	2	3	4	5
Bicycling	1	2	3	4	5
Archery	1	2	3	4	5
Horseback Riding	1	2	3	4	5
Off-road motoring (ie. motorcycling, 4-wheel drive)	1	2	3	4	5

PASSIVE RECREATION

Watching TV	1	2	3	4	5
Listening to music (music rooms)	1	2	3	4	5
Card games (ie. bridge)	1	2	3	4	5
Table games (ie. chess)	1	2	3	4	5

OTHER RECREATION

Traveling, sightseeing for pleasure (ie. weekend retreats)	1	2	3	4	5
Attending: Sports events	1	2	3	4	5
Attending: Concerts, plays	1	2	3	4	5
Attending: Movies	1	2	3	4	5
Going to dances	1	2	3	4	5
Musical instruments	1	2	3	4	5
Participating in clubs/organizations	1	2	3	4	5
Billiards	1	2	3	4	5

Photography	1	2	3	4	5
Sewing or other homemaking	1	2	3	4	5
Art (ie. painting, drawing)	1	2	3	4	5
Crafts (ie. macrame etc.)	1	2	3	4	5

Other activities or comments:

1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5

From various sources, a list of the recreational opportunities offered through the University is given. These opportunities are available through regularly - scheduled activity classes (or other classes), intramurals, the intercollegiate sports program, living groups, and campus clubs or organizations such as the Anderson Y, Newman Center, the A.S.U.O.P. etc.

Please circle the number indicating the degree to which you participate in these recreational activities.

- 1 - Never
- 2 - Seldom (1-3 times a year)
- 3 - Occasionally (1-3 times a month)
- 4 - Often (3-6 times a month)
- 5 - Very Often (7 or more times a month)

SPORT ACTIVITIES

Badminton	1	2	3	4	5
Volleyball	1	2	3	4	5
Tennis	1	2	3	4	5
Bowling	1	2	3	4	5
Golf	1	2	3	4	5
Fencing	1	2	3	4	5
Gymnastics	1	2	3	4	5
Weight Training	1	2	3	4	5
Men/Women's Fitness	1	2	3	4	5
Handball	1	2	3	4	5
Karate	1	2	3	4	5
Judo	1	2	3	4	5
Aikido	1	2	3	4	5
Yoga	1	2	3	4	5
Dance (Modern, Folk etc.)	1	2	3	4	5
Ice Skating	1	2	3	4	5
Golf	1	2	3	4	5
Football/Flag Football	1	2	3	4	5
Basketball	1	2	3	4	5
Baseball/Softball	1	2	3	4	5
Soccer	1	2	3	4	5

Water Polo	1	2	3	4	5
Swimming	1	2	3	4	5
<u>ACTIVE OUTDOOR RECREATION</u>					
Bicycling	1	2	3	4	5
Jogging	1	2	3	4	5
Horseback Riding	1	2	3	4	5
Snow Skiing	1	2	3	4	5
Scuba Diving	1	2	3	4	5
Sailing	1	2	3	4	5
Backpacking	1	2	3	4	5
Nordic Club: Cross Country Skiing	1	2	3	4	5
Anderson Y: Rowing	1	2	3	4	5
Jogging	1	2	3	4	5
<u>PASSIVE RECREATION</u>					
Watching TV	1	2	3	4	5
Library: Reading	1	2	3	4	5
<u>OTHER RECREATION</u>					
Table Tennis	1	2	3	4	5
Billiards	1	2	3	4	5
Attending: U.O.P. Sports Events	1	2	3	4	5
Attending: U.O.P. Concerts, Plays	1	2	3	4	5
Attending: Anderson Y Films	1	2	3	4	5
Participating in clubs	1	2	3	4	5
Music lessons	1	2	3	4	5
Photography	1	2	3	4	5
Newman Center:					
Weekend Retreats	1	2	3	4	5
Room for table/card games	1	2	3	4	5
Get-togethers	1	2	3	4	5
Campus Barbecues	1	2	3	4	5
Art (painting, drawing etc.)	1	2	3	4	5
Crafts (ceramics etc.)	1	2	3	4	5
Use of Y.M.C.A.					
(information at Anderson Y)	1	2	3	4	5

Which opportunities were you unaware existed?

Please circle the number, indicating the degree of your participation in these recreational activities outside (not connected with) the University program.

1 = Never

2 = Seldom (1-3 times a year)

3 = Occasionally (1-3 times a month)

4 = Often (3-6 times a month)

5 = Very Often (7 or more times a month)

SPORT ACTIVITIES

Badminton	1	2	3	4	5
Volleyball	1	2	3	4	5
Table Tennis	1	2	3	4	5
Tennis	1	2	3	4	5
Swimming	1	2	3	4	5
Bowling	1	2	3	4	5
Golf	1	2	3	4	5
Fencing	1	2	3	4	5
Gymnastics	1	2	3	4	5
Weight Training	1	2	3	4	5
Fitness	1	2	3	4	5
Handball	1	2	3	4	5
Karate	1	2	3	4	5
Judo	1	2	3	4	5
Aikido	1	2	3	4	5
Yoga	1	2	3	4	5
Dance	1	2	3	4	5
Ice Skating	1	2	3	4	5
Football/Flag Football	1	2	3	4	5
Basketball	1	2	3	4	5
Baseball/Softball	1	2	3	4	5
Soccer	1	2	3	4	5
Golf	1	2	3	4	5
Water Polo	1	2	3	4	5
Swimming	1	2	3	4	5
Diving	1	2	3	4	5

ACTIVE OUTDOOR RECREATION

Bicycling	1	2	3	4	5
Jogging	1	2	3	4	5
Backpacking	1	2	3	4	5
Camping	1	2	3	4	5
Cross Country Skiing	1	2	3	4	5
Snow Skiing	1	2	3	4	5
Waterskiing	1	2	3	4	5
Scuba Diving	1	2	3	4	5
Sailing, or other boating	1	2	3	4	5
Rowing	1	2	3	4	5
Surfing	1	2	3	4	5
Fishing	1	2	3	4	5
Markmanship	1	2	3	4	5
Archery	1	2	3	4	5
Jogging	1	2	3	4	5
Horseback Riding	1	2	3	4	5
Off-road motoring (ie. motorcycling, 4-wheel drive)	1	2	3	4	5

PASSIVE RECREATION

Watching TV	1	2	3	4	5
Listening to music	1	2	3	4	5
Card games (ie. bridge)	1	2	3	4	5
Table games (ie. chess)	1	2	3	4	5

OTHER RECREATION

Traveling, sightseeing for pleasure (ie. weekend retreats)	1	2	3	4	5
Attending: Sports events	1	2	3	4	5
Attending: Concerts, plays	1	2	3	4	5
Attending: Movies	1	2	3	4	5
Going to dances	1	2	3	4	5
Musical instruments	1	2	3	4	5
Participating in clubs/organizations	1	2	3	4	5
Billiards	1	2	3	4	5

Photography	1	2	3	4	5
Sewing or other homemaking	1	2	3	4	5
Art (ie. painting, drawing)	1	2	3	4	5
Crafts (ie. macrame etc.)	1	2	3	4	5

Other activities or comments:

1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5

APPENDIX C
THEORY CLASSES

THEORY CLASSES

College of the Pacific

General Chemistry (Section 4)
Composition (Section 1)
Advanced Composition
Civilisation Francaise A
Soviet and Nazi Dictatorships**
Great Epochs of Spanish Literature
Psychology of Child Development
Health Education
Individual and Group Behavior Change

Callison College

Comparative Marriage and Family
Introductory Chinese

Raymond College

Systems: Concepts and Math

Elbert Covell College

Analises economico intermedio
Diseno de investigaciones

School of Engineering

Structural Design I

School of Education

Curriculum Instruction (SS) - Jennings
Curriculum Instruction (MS) - Chambers

Conservatory of Music

Basic Materials: Theory Drill (Section 2; course no. 3asi)

School of Pharmacy

Physiology - Riedesel

* cross-listed with Raymond College

APPENDIX D
TABLE III
MEAN SCORES

TABLE III

MEAN SCORES FOR ALL LISTED RECREATIONAL OPPORTUNITIES, AND THE
AVAILABILITY OF THESE ACTIVITIES THROUGH THE UNIVERSITY OF THE PACIFIC

*How offered through University	Recreational Opportunities	Desire	Mean Scores	
			Participation "University"	Participation "Outside"
1	Badminton	2.06	1.38	1.60
1 2 3 4	Volleyball	2.49	1.66	2.07
3 5	Table Tennis	2.51	1.95	2.35
1 3 4	Tennis	2.85	1.93	2.43
1	Bowling	2.15	1.44	1.93
1 3 4	Golf	1.71	1.25; 1.25	1.52; 1.47
1	Fencing	-	1.14	1.12
1 2	Gymnastics	1.72; 1.74	1.20	1.31
1	Weight Training	2.07	1.53	1.73
1	Men/Women's Fitness	2.41	1.55	2.20
1	Handball	1.76	1.31	1.34
1 2	Karate	1.67	1.16	1.21
1 2	Judo	1.60	1.13	1.11
1 2	Aikido	-	1.08	1.08
1	Yoga	1.69	1.23	1.27
1 2	Dance	2.22	1.60	1.92
1	Ice Skating	2.17	1.42	1.73
3 4	Football/ Flag Football	2.13	1.79	1.88
3 4	Basketball	2.24; 2.19	1.80	2.00
3 4	Baseball/Softball	2.13	1.61	1.88
4	Soccer	1.70	1.25	1.39
1 3 4	Swimming	2.65	1.95	2.77; 2.70
4	Water Polo	1.34	1.14	1.15
-	Diving	1.59	-	1.44

*1= Class; 2= Club; 3= Intramural; 4= Intercollegiate; 5= Student Body/University Center.

TABLE III (continued)

How offered through University	Recreational Opportunities	Desire	Mean Scores	
			Participation "University"	Participation "Outside"
1	Bicycling	3.17;3.02	2.12	3.35
1	Jogging	2.47	1.86;1.74	2.35;2.22
1 2	Backpacking	2.42	1.40	1.76
-	Camping	2.54	-	1.99
1 2	Cross Country Skiing	1.83	1.10	1.22
1	Snow Skiing	2.50	1.53	1.97
-	Water Skiing	2.43	-	1.82
1	Scuba Diving	1.95	1.13	1.24
1	Sailing, or other boating	2.46	1.26	1.72
-	5 Rowing	1.61	1.10	1.21
-	Surfing	1.72	-	1.31
-	Fishing	2.07	-	1.76
-	Marksmanship	1.84	-	1.35
-	Archery	1.92	-	1.25
1	Horseback Riding	2.38	1.37	1.72
-	Off-road motoring	1.91	-	1.44
-	5 Watching TV	2.84	2.46	3.52
-	5 Library: Reading	-	3.15	-
-	Listening to music	3.61	-	4.36
-	Card games	2.34	-	2.40
-	Table games	2.25	-	2.16

*1= Class; 2= Club; 3= Intramural; 4= Intercollegiate; 5= Student Body/University Center

TABLE III (continued)

*How offered through University		Recreational Opportunities	Desire	Mean Scores	
				Participation "University"	Participation "Outside"
-		Traveling for pleasure	3.33	-	3.13
	5	Billiards	2.06	1.53	1.71
	5	Attending: Sports Events	3.03	2.83	2.76
	5	Attending: Concerts, Plays	3.26	2.57	2.72
	5	Attending: Movies/Films	3.31	2.31	3.01
2	5	Participating in clubs	2.46	1.91	2.19
1		Musical instruments/lessons	2.50	1.56	2.24
1		Photography	2.60	1.46	2.05
	5	Going to dances	3.02	-	2.66
	5	Campus barbecues	-	2.04	-
	5	Newman Center:	-	-	-
		Weekend retreats	-	1.14	-
		Room for table/card games	-	1.18	-
		Get-togethers	-	1.40	-
-		Sewing or homemaking	2.10	-	2.15
1		Art	2.32	1.54	1.94
1		Crafts	2.46	1.45	2.04
	5	Use of Y.M.C.A.	-	1.32	-

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